# The Economic Impact of Tourism Industries in British Columbia

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## Preface

The World Tourism Organization has estimated that one out of every 15 jobs in the world is related to tourism. Although that statement illustrates the importance of tourism in the global economy, until recently the status of tourism and its related industries was not fully recognized by governments nor the tourism industries themselves.

Tourism can be studied from either the "demand-side" that measures the characteristics and expenditures of tourists, or the "supply-side" that measures the output of the industries that produce the products and services used by tourists. On the demand-side, until recently, there have been no standard definitions. For example, business travellers are sometimes excluded from "tourist" categories, or local trips by residents are included with "same day" travellers from outside the region. As a result, it is frequently difficult to compare tourism research from different countries or provinces. The first section of this paper presents the World Tourism Organization definitions that were recently proposed to the United Nations, and discusses the characteristics of tourism from the demand-side.

In the last decade, there have been major "demand-side" studies of tourism across Canada, including British Columbia. These "visitor surveys" have measured the number of tourists by age, origin and other characteristics, and the total value of tourist expenditures. In using this demand-side approach, tourism is one of the few industries that attempts to measure its importance in terms of the characteristics of its users; other industries use a "supply-side" approach that measures the value of their output. For example, although the automobile industry is interested in the characteristics of new car buyers for product development and marketing, the measurement of the output of the auto industry is from the supply-side -- values of total output, GDP produced, inputs used and employment in the industry. These are the factors that determine the economic impact of an industry.

In the last five years, tourism has begun to be examined from the supply-side. This approach focuses on the "tourism industries" which provide the accommodation, meals, attractions, tours and other goods and services to tourists. For the first time, the economic importance of tourism has been measured in the same terms as other industries, through the output, value-added and employment produced in the tourism industries.

Measuring the economic impact of the tourism industries presents some significant challenges that are addressed in the second part of this paper. First, there are no standard classifications for "tourism industries" and "tourism-related industries". Second, in the government economic accounts, there is no one single category to represent "tourism" because the revenues and GDP from tourism are spread across a number of accounts and

classifications. Third, it is difficult to estimate the proportion of output which is purchased by tourists. The tourism industries are composed of tens of thousands of diverse, small-scale businesses which produce the products and services used by tourists; however, because these businesses, such as restaurants or golf courses, serve both local residents and tourists, it is not possible to attribute their entire output to "tourism". Specific estimates of tourism proportions are required for each industry sector in each region in order to estimate the economic impact from tourism.

Tourism is an important and growing industry; with the increasing interest in sustainable development, many aspects of tourism are receiving greater attention. In the current decade, important public policy decisions and private development plans will be made which will significantly affect B.C.'s tourism in the next century. However, in comparison to the primary and manufacturing industries, there is an information gap -- a lack of reliable, comprehensive tourism industry data and information upon which to base these decisions. As a result, both private and public policies are frequently made "in at least partial ignorance of the existing situation".

British Columbia has taken an important step to close this information gap by creating a special tourism "satellite" account in the government economic accounts. One of the first accounts of this type in the world, the B.C. Tourism Satellite Account is a detailed, extensive data set that measures the financial, economic and characteristic data of tourism industries in the province. Although still in the development state, it has begin to provide essential information to planners, governments and B.C.'s tourism industries themselves, and it was a major source for this report.

The Tourism Satellite Account is the framework for the development of better data on the tourism industries. Future research will help to fill identified gaps in data and to develop linkages with other on-going administrative data sources. As this data set is developed and included in the T.S.A., a more complete profile of the tourism industries will emerge and lead to estimation of the "Tourism GDP".

# PART ONE: THE TOURISM INDUSTRY

## SECTION 1: INTRODUCTION AND TOURISM ECONOMIC IMPACT TERMINOLOGY

### 1.1 Introduction

The Tourism Industries are made up of tens of thousands of businesses across the province that produce the goods and services that are used by tourists. These businesses offer accommodation, food and beverage services, recreation, transportation and retail sales and range in size from large hotel chains to part-time fishing guides. They hire workers, purchase inputs, pay taxes and create "value-added" in their products. Altogether, the tourism industries produce significant economic impacts in the B.C. economy.

This paper attempts to estimate these economic impacts. It has found some surprising results. The food and beverage industry produces as much in GDP as all residential construction in the province, the recreation and amusement industries contribute as much to the economy as the electronics industry, hotels alone earn the same value-added as B.C.'s petroleum, natural gas and coal mining industries and, overall, the core and tourism-related industries produce more than the primary fishing, primary forestry and mining industries added together. Out of every $100 spent on accommodations in B.C. over $35 is paid in wages and a total of $65 is added to the province's GDP in contrast to an industry such as forestry which adds only $34. These observations are based on a new tourism database, the *Tourism Satellite Account (TSA),* which has produced accurate estimates of key tourism-related industries for the first time.

This paper is presented in two parts. Part one defines tourism and presents the methodology for economic impact analysis in section 1. Section 2 examines tourism from the demand and supply sides. The TSA, the major source of data for the analysis is discussed in section 3. Part two of this paper combines the findings of the TSA with data from sector studies and government statistics to examine the direct economic impact of the tourism industries in B.C. in sections 4 to 9. The final section discusses the indirect and induced economic impacts.

### 1.2 Tourism Definitions

Visitors, tourists and excursionists are all special categories of travellers. The distinction between these terms is shown diagrammatically in figure 1A. Tourism generally is

related to a non-routine break from the usual environment[1]. In June 1991, the World Tourism Organization (WTO) established standard international tourism definitions and plans to submit them to the United Nations for endorsement in the near future[2]. The WTO defines international tourism (inbound and outbound tourism) and internal tourism (resident travel within a country) as follows:

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International tourism definition: A **visitor** is a person who travels to a country other than that in which he/she has his/her usual residence and that is outside his/her usual environment, for a period not exceeding one year, and whose main purpose of visit is other than the exercise of an activity remunerated from within the country visited.

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Internal Tourism definition: A **visitor** is a person residing in a country, who travels to a place within the country, but outside his/her usual environment, for a period not exceeding six months, and whose main purpose of visit is other than the exercise of an activity remunerated from within the place visited.

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The definition of visitor excludes travellers such as members of the armed forces or representatives of diplomatic missions and consulates[3]. Visitors are divided into tourists and excursionists depending upon the length of stay:

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A **tourist** is a visitor who travels to a place outside his/her usual environment for at least one night.

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An **excursionist**, or same day tourist, is a visitor who travels to a place for less than 24 hours without spending the night in the place visited.

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A summary of the WTO definitions is presented in Appendix 1. The WTO has recognized the need for international standards for minimum round-trip distance and duration, however, these have not yet been established. Statistics Canada and Tourism Canada include "travel by a person or persons returning home from a location 80 km or

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[1] World Tourism Organization, Conference Resolutions from the International Conference on Travel and Tourism Statistics, page 9.

[2] Ibid, page 6.

[3] Visitors include all travellers except transit passengers, border workers, nomads, refugees, permanent or temporary immigrants, and members of the armed forces, diplomatic missions or consulates.

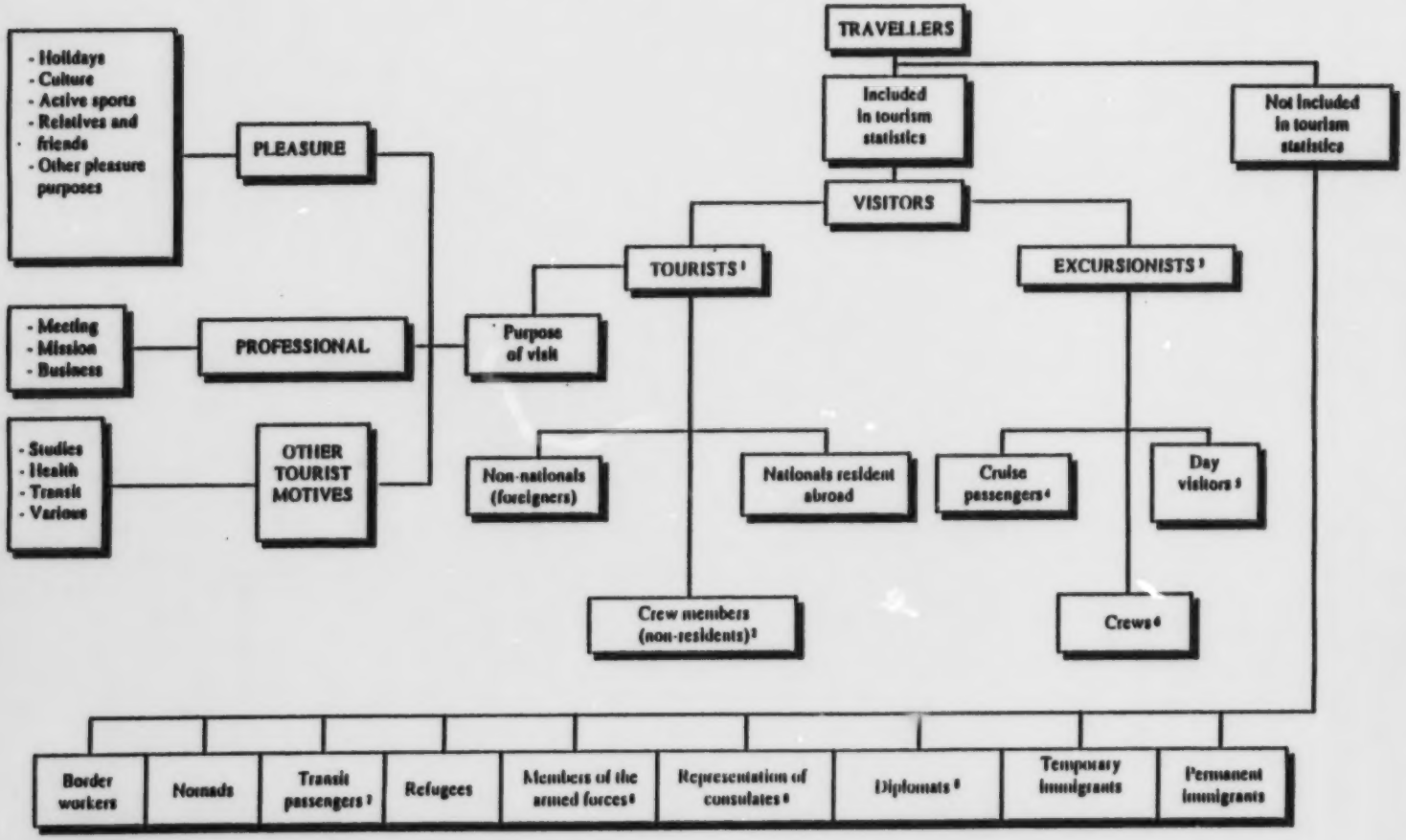


Figure 1A:
Diagram of the Classification Scheme for Tourism Definitions
(World Tourism Organization)

1. Visitors who spend at least one night in the country visited.
2. Foreign air or ship crews docked or in lay over and who use the accommodation establishments of the country visited.
3. Visitors who do not spend the night in the country visited although they may visit the country during one day or more and return to their ship or train to sleep.
4. Normally included in excursionists. Separate classification of these visitors is nevertheless recommended.
5. Visitors who come and leave the same day.
6. Crews who are not residents of the country visited and who stay in the country for the day.
7. Who do not leave the transit area of the airport or the port. In certain countries, transit may involve a stay of one day or more. In this case, they should be included in the visitors statistics.
8. When they travel from their country of origin to the duty station and vice versa (including household servants and dependants accompanying or joining them).

*Source:* World Tourism Organization.

more away" in the Canada Travel Survey[4]. The *Resident Travel in B.C.* study included a minimum travel distance of 50 km or more in their definition of excursionist[5].

The purpose of travel is classified into pleasure, professional and other. Although some researchers once questioned the inclusion of business travel, it is now an accepted part of the industry definition of tourism. Conference centre delegates and other business travellers use many tourist commodities, and "tourist attraction rating" is an important determination of the location of a conference. Since the daily expenditures of business travellers are significantly higher than other tourists, business travel is an important segment of the tourism market.

The origin of the visitor is usually divided into "domestic" or "international" visitor in national tourism studies. Useful categories for the B.C. tourism industry are "B.C. residents", "other Canada", "USA" and "international" visitors.

The **tourism industry** consists of "all those firms, organizations and facilities which are intended to serve specific needs and wants of tourists"[6]. The National Task Force on Tourism Data proposed the following definition[7]:

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**Tourism** is the aggregate of all business that directly provides goods or services to facilitate business, pleasure or leisure activities away from the home environment.

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**Tourism expenditure** measures **tourism consumption**, the total value of goods and services used for the direct satisfaction of visitors[8]. These **tourism commodities** include the advance outlays necessary for the preparation and undertaking of the trip, expenses arising when travelling, and when returning from the trip[9]. Therefore, tourism has an economic impact on an economy from the first purchase of a guide book to the last expenditure when the vacation photographs are developed.

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[4] Definition provided by the Statistics Canada information service.

[5] *Resident Travel in B.C.*, page 79.

[6] Travel, Tourism and Hospitality Research definition.

[7] Stephen Smith, Defining Tourism: A Supply Side View, page 181.

[8] Antonio Merediz Montero, Basic Design and Classifications for Tourism Statistics, page 27.

[9] Ibid, page 28.

## 1.3 Economic Definitions

The **System of National Accounts (SNA)** measures the level of economic activity in a country or province. **Gross Domestic Product (GDP)**, the most important yardstick, measures the total value of the production of goods and services produced within a country or region in a year. It can be calculated by measuring either the total value of all expenditures on *final* goods and services[10] sold in the economy, or the total of all the incomes or "value-added" which accrue in the production of those goods and services. In simple terms, **value-added** (or GDP) is what remains from revenues earned after all material inputs and supplies have been paid for. The value added is what is available to be shared among workers (in the form of wages), capital (in the form of depreciation and interest payments to the bank) and owners (in the form of profits). Since the purchase of a $5 admission ticket at an amusement park can be viewed either as the expenditure of $5 or as $5 earned by the workers, owners of the park and the suppliers and producers of its inputs, the expenditure or value-added approaches are equivalent.

B.C.'s Gross Domestic Product at factor cost[11] was $61.4 billion in 1988. In the last 20 years, the primary and manufacturing "goods producing" industries have steadily decreased in importance from 41% of GDP in 1961 to less than 32% today. The recent growth in the B.C. economy, and in most industrialized countries, has come from the business "service" sector which produces 55% of the economy's GDP. The business service industries are a diverse group which include finance, insurance and real estate, wholesale and retail trade, transportation and communications, accommodation and food, and private education and health services. Since travellers use accommodation, food services, transportation, recreation and entertainment and purchase retail goods, the tourism industry is spread across the major service industries.

The **GDP by Industry Account** of the SNA shows the amount that each industry or sector has contributed to the economy. For example, in 1989, the accommodation and food service industry produced $2.4 billion in value-added, the total of the wages and

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[10] There is a distinction between final goods and services and inputs (primary and intermediate goods). Final goods and services are those goods or services which are used by the final user. For example, apples purchased by a family (or exported to the U.K.) would be classed as final goods and included in B.C.'s GDP; apples purchased by a restaurant would be classified as inputs and excluded from GDP.

[11] GDP at factor cost is the value of the output of firms at their producer prices (which do not include any indirect taxes). GDP at factor cost plus indirect taxes minus subsidies equals GDP at market prices which measures the value of output at purchaser prices as it is sold to the final user. Throughout this paper GDP refers to GDP at factor cost.

business surplus[12] earned in that sector. The tourism industry purchased inputs produced by other industries from agriculture to manufacturing. However, another form of accounts that present the "input-output matrix" is necessary in order to see this interrelationship between industries.

An **Input-Output Model (I-O model)** describes an economy as a system of integrated flows of goods and services from the "maker" industries to the "user" industries. The chemical industry is a "user" when it purchases oil from the petroleum industry and is a "maker" when it sells the chemical fertilizer to its "user", the agriculture industry. Agriculture, as a "maker", grows fruits and vegetables which it sells to a "user" restaurant in the accommodation and food industry. In a single, albeit slightly unwieldy, input-output matrix, the entire economy can be viewed from the perspective of interrelationships between industries.

Early I-O models in the 1940's used as few as 30 industries, but computer technology and the quality of information has enabled governments to prepare I-O tables for over 216 industries and 632 individual commodities. With this level of knowledge and sophistication, it is possible to extend the model to show the effects that an increase in a particular sector would have on the whole economy. For example, if the I-O model included a category for restaurants, then, as the demand for restaurant meals increased, the effect on the agriculture, petroleum and other industries could be studied.

The SNA and the input-output models for the Canadian and B.C. economies present detailed information on primary and manufacturing industries. However, when it comes to tourism statistics, the important tourism commodities are assigned to broad business service categories such as accommodation and food. The standard accounts do not measure output at the level of detail (for example, hotels and restaurants by size and type) necessary to study the economic impact of tourism. Recognizing this, B.C. created the "Tourism Satellite Account" to measure and present the data that was previously unavailable in standard national accounts.

The **Tourism Satellite Account (TSA)** is a separate, but related, I-O model specifically for tourism. It is also an extensive database that summarizes tourism data from both the demand and supply sides. The first report of the B.C. Satellite account for Tourism was published in August, 1991. For the first time it enables us to see the contribution of key sectors of the tourism industry to the B.C. economy. The Tourism Satellite Account is

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[12] Once the cost of material inputs and wage related payments are made, the remainder is the "business surplus" which are the payments for depreciation, interest payments and profits.

discussed in detail in section 3, and served as the major data source for the economic impact analysis in this paper.

## 1.4 Overview of Economic Impact Analysis

Many claims have been made about the economic impact of tourism. International tourism organizations state that tourism creates one out of every 15 jobs in the world[13] and will produce over $3 trillion in gross output in 1992[14]. Obviously, estimates such as these attract attention to the economic impacts from tourism and encourage governments and local businesses all over the world to wonder how they can benefit from some of this spending. Economic impact studies that attempt to measure the benefits of tourism, as well as the costs, have become popular in recent years. All of them follow a basic format that attempts to measure, first and foremost, the direct impacts, the total spending by tourists, and then to estimate the indirect and induced impacts of tourism as the effects of the initial spending spill over into other industries in the economy.

## 1.5 Direct Economic Impacts

The **direct economic impacts** of tourism are created by the "first round" spending of tourists and depend upon the proportion of value-added created, or inversely, the proportion of material inputs being used. When a tourist spends $50 on a restaurant meal or $50 on souvenirs, the purchases create two very different direct economic impacts. If the restaurant uses proportionally fewer material inputs (and therefore produces more value-added to share among workers and owners) than the souvenir shop, it will produce higher direct economic impacts in the economy.

A valuable gauge for comparing the economic impact from two industries is the **GDP-to-output-ratio**. This statistic measures the proportion of value-added in total output. For example, two companies each produce $100,000 worth of output. The first, a restaurant, purchases $48,000 in material inputs. It has a high proportion of labour costs ($36,000) and operating surplus ($16,000); therefore, it produces $52,000 in value-added for a GDP-to-output-ratio of 0.52. The second company, a small lumber company, has a higher proportion of material inputs ($69,000); therefore its value-added is only $31,000 for a GDP-to-output-ratio of 0.31. Although both companies produce output of $100,000

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[13] World Tourism Organization, cited in Harper's Magazine, August 1991, page 11.

[14] World Travel and Tourism Council statistics, Stephen Wheatcroft, Measuring the Performance of the Transport Industry, Appendix, page 9.

dollars, the restaurant contributes more to the local economy -- its direct economic impact is approximately 52 cents out of every dollar of output.

The direct economic impact of tourism is measured by the value of GDP earned in all the industries which supply goods and services to tourists. Frequently, governments and economists are also concerned with the value of wages paid and the number of jobs that are directly created by these tourism industries. Obviously, the size of the direct economic impact from tourism depends directly on the total expenditures and the spending patterns of tourists, and the characteristics of tourist-related businesses in the area.

## 1.6 Indirect and Induced Economic Impacts

The indirect and induced economic impacts result from the direct impacts of the first round of spending by tourists. The businesses that provide the tourist commodities purchase their supplies and inputs from other businesses which purchase their supplies and inputs from others. The second, third and subsequent rounds of expenditures make up the **indirect economic impact** from tourism. The size of the indirect "multiplier" effect depends on the amount of material inputs that are purchased from other businesses in the economy; higher material purchases or a lower proportion of imports[15] both mean a higher multiplier. The indirect effect may be quite small in a remote part of the province that has few secondary industries, but for the province as a whole the indirect effects can be considerable. The higher the level of industrialization and the greater the variety of goods and services produced, the larger the indirect effects.

The tourist expenditures also create an **induced economic impact** which results from spending part of the income earned by the workers and owners who provided the tourism commodities. Although part of their income goes into taxes and savings, a large portion is spent in the economy, creating a round of induced economic effects. The **total economic impact** of tourism is the sum of these direct, indirect and induced effects.

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[15] This is usually referred to as the propensity to import.

## SECTION 2: THE DEMAND AND SUPPLY SIDES OF TOURISM

### 2.1 Tourism's Demand and Supply Framework

The tourism industry is driven by the forces of demand and supply. The tourists are the consumers on the demand side who photograph whales from boats on the west coast, stay on guest ranches, tour historical sites and buy souvenirs. In contrast, the tourism industry is made up of businesses on the supply side which provide the kayaks and rooms to rent, tours to take and items to buy.

In order to measure the characteristics of tourism and its economic impact, this diverse industry is measured from both the demand and supply sides. A framework that describes the methodology for studying tourism is presented in figure 2A. The demand side, on the right of the diagram, is studied through visitor surveys such as *Visitor '89*. In addition to gathering information on the personal characteristics of the visitor, surveys are important sources of data on the patterns of daily tourist expenditures.

The middle section of figure 2A presents the product, the tourist commodities. These are measured through detailed market studies of local tourist facilities and competition analyses. Since 1988, the Research and Information Management Branch of the Ministry of Tourism has commissioned more than a dozen studies to measure the existing and potential market for such activities as wildlife viewing, the ski industry and marine tourism.

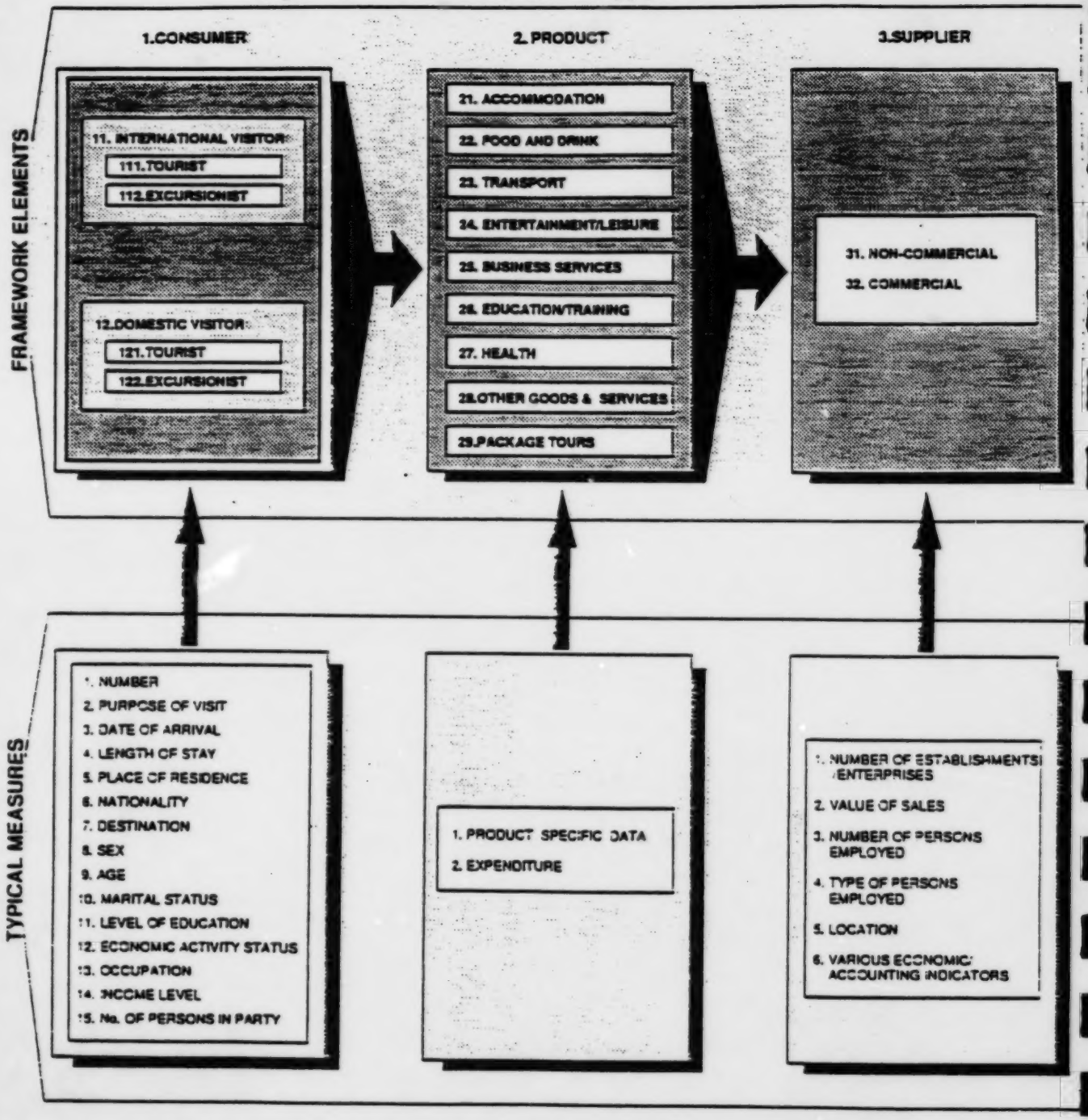
The left side of the tourism framework, the supply side, measures the economic characteristics of the businesses in the tourism industries. Important supply side data include the value of GDP produced, wages paid, employment generated and detailed information on the inputs used. These data, available only in financial statements or specific economic surveys, are essential in determining the economic impact of tourism.

### 2.2 Tourism from the Demand Side

#### 2.2.1 The Demand for Tourism

The total demand for tourism, that is the demand for everything from bus tours to film development, is determined by important factors relating to demographic, psychographic and socio-economic factors, as well as advertising and price. These are listed in figure 2B.

Figure 2A:
Diagram of The Demand Side and Supply Side of Tourism




Source: Martin Butterfield, "Framework for the Collection and Publication of Tourism Statistics," International Conference on Travel and Tourism Statistics, June 1991.

## Figure 2B:
## Factors Affecting the Demand Side of Tourism

- Demographic factors
  - age distribution of population
  - average life expectancy
  - stage in lifecycle
    - size of family
    - age of children
- Socio-economic factors
  - family disposable income
  - expectation of future income
  - savings
  - available vacation time
    - annual paid vacation
    - national holidays
    - available transportation
    - pattern of leisure time
    - characteristics of last vacation
  - trends in travel and leisure activities
- Psychographic factors
  - motivations
    - desire relaxation
    - desire outdoor experiences
    - desire unfamiliar, exotic scenery
    - want to experience new cultures
    - want to visit friends and family
    - want to attend cultural, sporting events
    - want to travel to improve health
  - perceptions of destination
    - image
    - cost of vacation
    - threat of terrorism
- Promotion and Advertising
  - marketing plans
  - package tours
- Price
  - actual cost of vacation
  - relative domestic price level
  - foreign exchange rates
    - and purchasing power parity
  - price of airfares, transportation

Source: Table drawn from Peter Murphy, Tourism: a Community Approach, and other articles cited in the Demand for Tourism discussion in this paper.

In terms of demographic factors, the size of the population of potential tourists is certainly an important factor for tourism demand. In addition to over 3 million residents in B.C., there are another 22 million people in western Canada and the USA within a 2-day drive from Vancouver[16]. In 1989, more than 44% of tourists from outside the province were in this "rubber tire" category (so called because they travelled to B.C. by car or recreational vehicle).

The population growth rate in B.C. in the last 10 years has averaged 1.7% annually[17] from births and immigration from outside the province. Although the population in Canada and other western countries as a whole is growing by less than 1% annually, changes within the population distribution have increased tourism demand. The "bulge" in the 25- to 45-year-old age groups in the population pyramid in figure 2C represents the "baby boom" population. This group constitutes 40% of the population; their rising incomes and growing interests in recreation and leisure activities are creating the demand for adventure tourism and wildlife viewing activities[18]. They are joined by another significant group, the "empty nesters" in the over 55 age category who have the leisure time and the income to travel. This older group is contributing to the increasing demand for golf facilities and packaged vacations.

Socio-economic factors affecting the demand for travel include a wide range of aspects from family income and available vacation time to trends in leisure and travel. Income is one of the most important determinants of tourist demand. Generally, people in western countries spend, at most, 15% of their after-tax income on travel[19]. As expected, tourism spending increases with average income; estimates have shown that in North America, it is "income inelastic"[20], which means that a 10% rise in income causes travel spending to rise , but by less than 10%. *Visitor '89* examined the income levels of non-resident tourists and estimated that the average spending per person-trip rose $60 for each additional $10,000 in average income[21].

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[16] 1990 Canada Facts: An International Comparison.

[17] Economic Statistics Report, BC Stats.

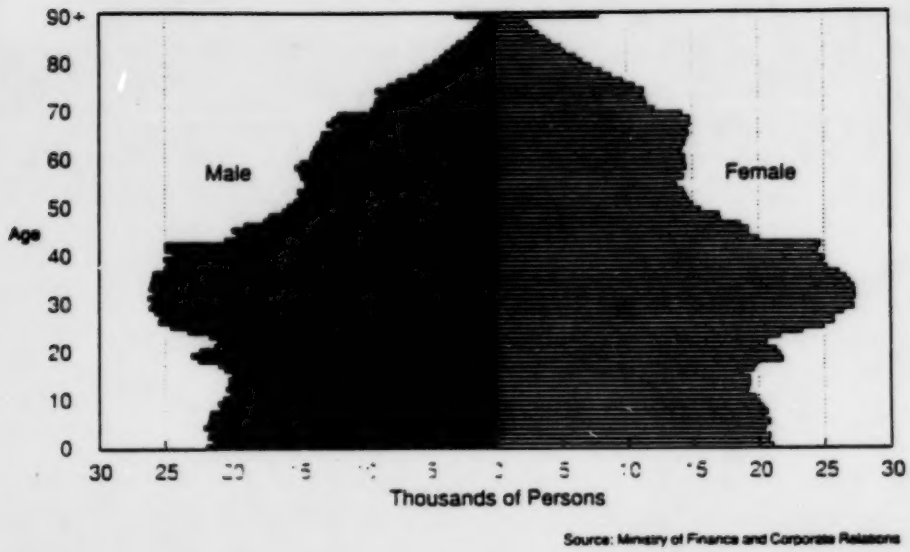
[18] Suzanne Cook, Discover America 2000: The Implications of America's Changing Demographics and Attitudes in the US Travel Market.

[19] The Economist, A Survey of World Travel and Tourism, page 10.

[20] Jojo Quayson and Turgut Var, A Tourism Demand Function for the Okanagan, B.C., page 12.

[21] *Visitor '89*, Appendix, page 3.

Figure 2C:
The Distribution of the British Columbia Population
by Age and Sex in 1989




Source: 1990 British Columbia Economic and Statistical Review, page 39.

Hours of work, annual leave and national holidays affect the length of time available for travel. Recent trends have shown an increase in "get away" travel with shorter trips and more excursion travel[22]. The recent recession has accentuated this pattern.

Psychographic factors examine attitudes towards life and the perceptions and motivations for travel[23]. As the modern tourist industry has developed in sophistication, it has relied increasingly on market segmentation, creating and marketing specific tourism "experiences" to match the different motivations for travel. The other psychographic factor is the perception of destination. Its importance was demonstrated clearly in early 1991 when the Gulf war increased the fear of terrorism, resulting in a significant drop in travel worldwide[24].

Advertising and promotion are important factors in tourist demand. In addition to providing information on the specific destinations, tourist facilities and tours, advertising and promotion help to create the desire for travel and influence the psychographic factors affecting demand.

Price is the final factor listed in the demand for tourism, although it is frequently the first factor considered by the tourist. Economic models that forecast tourism demand are based on movements in inflation rates, foreign exchange rates and purchasing power of currencies in the home region compared to the vacation destination. Generally, the price of travel at the destination is much more important than transportation costs or changes in exchange rates[25]. A recent Tourism Canada study of tourists' perceptions of travel prices found the total cost of the trip influenced the decision to come to Canada for 45% of past visitors and 58% of potential visitors to Canada[26]. Of those who were influenced by price, 20% would not come to Canada if the expected total cost of travel in Canada was equal to that in the U.S.; only 50% would come to Canada if the expected total cost in Canada was 50 percent higher than U.S. travel costs[27].

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[22] The Economist, A Survey of Travel and Tourism, page 8.

[23] Mike Sheridan and David Brusegard, Lifestyles - A New Dimension for Travel Data, page 1-4.

[24] Idem.

[25] Pascal Trembley, Pooling International Tourism, page 487.

[26] Travel Price / Value Perceptions Study, Tourism Canada, Volume I - U.S. Telephone Survey Report, March 30, 1990, page 41.

[27] Ibid, Exhibit 26.

### 2.2.2 The Measurement of Tourism from the Demand Side

The demand side of tourism is measured by the number and characteristics of the people who purchase the tourism commodities. The number of tourists is estimated from the number of crossings at the B.C.-U.S.A. border, cars in Roger's Pass, cruise ship and airline passengers landing in B.C. or attendance at attractions. However, the characteristics of tourists can only be measured with detailed visitor surveys. The information from surveys such as *Visitor '89* and the *Resident Travel in B.C.* study is used by the tourist industry to create and market the province's tourist facilities and commodities.

In recent years, there has been an increasing sophistication in the survey methodology used to measure the demand side of tourism. The survey typically takes one of two forms which poll either the tourist or the household. The first presents a questionnaire to a selected sample of visitors in a particular destination or activity. The second conducts a survey of households in a particular area and collects information on any plans for future vacations. Both surveys can include diaries which are filled out daily during the vacation to report daily activities and expenditures on various categories such as accommodation, restaurant meals, groceries and recreation.

Surveys of tourist expenditures, unfortunately, are frequently biased. There is a "general unwitting tendency to underestimate, as people do not add up all their expenditures... or deliberately underestimate expenditures because of a fear that information might get to the tax authorities"[28]. The *Resident Travel in B.C.* study used both surveys and diaries in its data collection process. It found that the tourism expenditures reported by the diary respondents were 30% higher than the second group who answered surveys based on their recall of expenditures. Either the diary method is more accurate, or there is a tendency for diary respondents to save their reports for the next "big" trip, thereby biasing the results upwards.

Tourism is the only major industry that has relied on demand side measurements to evaluate its important economic aspects. The lumber industry measures the value of lumber sold or the number of board feet produced, but not the motivations of the people or businesses which buy the lumber. Measuring industrial production in terms of personal characteristics seems ludicrous, yet this has been the standard approach in the tourism industry. Visitor surveys are expensive undertakings which yield "snap-shot" pictures of the industry. Although they are very useful for product development and

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[28] The Economist Intelligence Unit, International Tourism Forecasts to 1995, page 78.

marketing strategies, they cannot provide the necessary time-series economic data needed to determine the economic impact of the industry.

## 2.3 Tourism from the Supply Side

### 2.3.1 The Supply Side of Tourism

The tourism industry is the supply side of the market for products and services related to tourism. From the supply side, data such as the number of rooms available, occupancy rates, and labour force characteristics are measured. Economic impact studies approach tourism from the supply side to measure the value of the products and services produced, and their contributions to incomes, wages and salaries, capital investment and government revenues.

There are three steps in determining the economic impact of the tourism industry. The first step is to identify the service and goods producing sectors which form the tourism industry. The second step is to measure the output, GDP, wages, taxes and other important economic values produced by these industries. The final step is to estimate the proportion of the output of these industries that can be attributed to tourist expenditures.

### 2.3.2 Tourism Industry Definition

There is no one individual tourism industry. The **tourism industry** consists of all the firms, organizations and facilities which are intended to serve the needs and wants of tourists[29]. This supply-side definition defines the industry in terms of the goods and services that it produces. Classifying tourism from this approach is a complex task since some sectors such as travel agents, serve only tourists while others, such as restaurants, serve both travellers and local residents.

Because of the diversity in the tourism industry, the National Task Force on Tourism Data proposed a two-tier system of classification. A modified version of their list is presented in figure 2D. Tier one contains the **core tourism industries** that serve the traveller directly and would cease to exist if there were no travel[30]. These businesses provide accommodation, transportation and travel services. Nearly 100% of their output is used directly by tourists and excursionists.

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[29] Travel, Tourism and Hospitality Research definition.

[30] Stephen L.J. Smith, Defining Tourism: A Supply Side Approach, page 184.

## Figure 2D:
## The Three Levels of Tourism Industries

TIER ONE: CORE TOURISM INDUSTRIES

ACCOMMODATION:
- Hotels and Motels
- Fishing / Hunting camps / Adventure Travel
- Vacation Rentals
- Campgrounds, Trailer parks

TRANSPORTATION:
- Air passenger service
- Inter-urban buses
- Charter and sightseeing busses
- Rail passenger service
- Passenger ships, ferries, sightseeing boats

TRAVEL SERVICES:
- Travel agents
- Tour operators
- Travellers' aid centres
- Tourism bureaux
- Tourism development and promotion programmes

TIER TWO: TOURISM RELATED INDUSTRIES

TRANSPORTATION:
- Automobile rental
- Taxis
- Limousines, caleches
- Automobile clubs

FOOD AND BEVERAGE SERVICES:
- Licensed restaurants
- Unlicensed restaurants
- Take-out food, snack bars
- Taverns, bars, nightclubs

RECREATION FACILITIES:
- Golf courses
- Ski resorts
- Theme parks, amusement parks
- Marinas
- Other facilities

CULTURE AND ENTERTAINMENT:
- Museums and galleries
- Botanical gardens and zoos
- Theatrical companies, theatres
- Race-tracks
- Professional sports clubs

RETAIL:
- Gift and souvenir shops
- Camera and photographic supplies
- Gasoline stations
- Sporting goods sales
- Luggage

(continued on the next page)

## Figure 2D:
## The Three Levels of Tourism Industries
(continued)

TIER THREE: INDUSTRIES SUPPLYING THE TOURISM INDUSTRY

- Hotel and restaurant suppliers
- Construction, real estate
- Distillers, brewers
- Motor vehicle manufacturers
- Motor fuel production
- Clothing manufacturers
- Telecommunications
- Computers
- Airplane manufacturers
- Cartographers
- Financial institutions
- Advertising media
- Food producers and distributers
- Reservation systems
- Credit cards and banking services

Tier One and Two: compiled from Canadian and US information in Stephen Smith, Tourism Analysis, page 34-37 and Canadian Tourism Facts.

Tier Three: compiled from Canadian Tourism Facts

The **tourism-related industries** form tier two. If there were no travel, they would continue to exist, but at a substantially reduced level[31]. These are industries that supply the tourism industries at the core or produce goods and services that have a medium tourism component. These include taxi cabs, restaurants, golf courses, ski facilities, museums and other cultural activities.

Canadian Tourism Facts adds a third tier, **industries supplying tourism**, in its classification of tourism industries. This tier includes motor vehicle and clothing manufacturers. Even though a small fraction of their total output is related to tourism, these businesses produce important products for the tourism industry.

### 2.3.3 Measurement of the Tourism Industry from the Supply Side

In order to determine the economic impact of tourism industries in B.C.'s economy, the value of their output must be measured. This is not a simple task, as many researchers have discovered, because of the lack of accurate data. There are four major difficulties in measuring the economic importance of tourism: (1) the diversity of tourism's goods and services, (2) the large number of small businesses in the tourism industries, (3) the level of aggregation of available data, and, (4) the difficulties in estimating tourism ratios.

In measuring the economic impact of tourism, the first difficulty is that many compilers of industrial classifications argue that the tourism industry does not exist because it does not produce a distinct product[32]. It is easier to measure board feet of lumber or tonnes of coal than diverse categories such as meals or souvenirs.

The second difficulty relates to the availability of reliable data. Much of the data are only rough estimates because it is too expensive or time consuming to survey the businesses in the tourism industry. With only 4,000 manufacturing establishments in the entire province, the characteristics of any one of its sectors can be surveyed annually at a relatively low cost. For example, almost 25% of the 1987 GDP in manufacturing was produced by only 63 large-scale pulp and paper companies[33]. In comparison, the tourism industry is made up of tens of thousands of individual small businesses, making a survey of the industry a herculean task.

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[31] Idem.

[32] Peter Murphy, Tourism: a Community Approach, page 9.

[33] Statistics Canada, Manufacturing Industries of Canada, catalogue 31-203.

The third problem in estimating tourism's impact is that much of the data that are available are published in an aggregated form which does not supply enough detail to identify specific goods or services that are important to tourism.

The fourth difficulty lies in the estimation of tourist ratios or the proportion of total sales that are made by tourists. This will be discussed in detail in the next section.

### 2.3.4 Estimating Tourism Ratios

The tourism industries produce goods and services that are purchased by both travellers and local residents. After measuring the total GDP of these industries, the next step is to determine the proportion that can be attributed to the travel industry. Without detailed information from the businesses themselves, most researchers rely on rough estimates made for broad categories. The National Task Force on Tourism Data[34] have published their estimates of tourism ratios. They consider one hundred percent of the revenues of the core tourism industries can be attributed to tourism. In the tourism-related industries, the tourism ratios vary from 75% of meals served in hotels to 15% of stand-alone restaurants. Other researchers have attributed differing proportions. Figure 2E summarizes current estimates of tourism ratios from various sources.

Obviously, it is difficult or next to impossible to generate one figure that can apply to a wide variety of goods and services. A hotel restaurant will have a higher percentage of tourists within their clientele compared to a local family restaurant. A retail store in Vancouver's Gas Town will cater to tourists more than a store in the nearby Vancouver Centre. Research on tourism proportions is currently being conducted by Tourism Canada, The U.S. Travel Data Centre and the OECD. In the economic impact study in sections 4 through 8, tourism ratios will be discussed separately for each major sector in the tourism industry.

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[34] The methodology used by the National Task Force to estimate the tourism component of each sector is summarized in Defining Tourism: A Supply-Side View by Stephen L.J. Smith, Annals of Tourism Research, volume 15, 1988, pages 179-190.

Figure 2E ESTIMATES OF TOURISM RATIOS:

| TIER ONE: CORE TOURISM INDUSTRIES | (1)Canadian Task Force | (2)WT and TC | (3) Simard and Hill |
|---|---|---|---|
| ACCOMMODATION: | | 29% Accommo and Food | |
| Hotels 75+ rooms | accomm:100% | | 100% |
| Motels | other: 75% | | 100% |
| Hotels 1-75 rooms | accomm:100% | | 100% |
| Beverage Hotels | other: 15%* | | 100% |
| Adventure Travel | 100% | | 100% |
| Vacation Rentals | 100% | | 100% |
| Campgrounds | 100% | | 100% |
| TRANSPORTATION: | | 45% all transport | |
| Air passenger service | 100% | | 100% |
| Inter-urban buses | 100% | | 100% |
| Charter, tour busses | 100% | | 100% |
| Rail passenger service | 100% | | 100% |
| Passenger ships ferries | 100% | | 100% |
| TRAVEL SERVICES: | | | |
| Travel agents | 100% | 100% | 100% |
| Tour operators | 100% | 100% | 100% |
| Travellers' aid centres | 100% | 100% | 100% |
| Tourism bureaux | 100% | 100% | 100% |
| Tourism development and promotion programmes | 100% | 100% | 100% |

| TIER TWO: TOURISM RELATED INDUSTRIES | Canadian Task Force | WT and TC | Simard and Hill 1986 |
|---|---|---|---|
| TRANSPORTATION: | | 45% all transport | |
| Automobile rental | 30% | | 33% |
| Taxis | 30% | | 33% |
| FOOD AND BEVERAGES: | 15% | 29% FB + Accommo. | 25% |
| RECREATION AND ENTERTAINMENT: | 47% | 35% | 50% |
| RETAIL SALES: | | | |
| Gasoline sales/ service | 25% | 25% | 0.5% fuel |
| Food/Bev/Tobacco | | 0.05% | |
| Clothing/ Footwear | | 0.1% | |

Sources: (1) Stephen Smith (Task Force on Tourism Data), Defining Tourism: A supply side view, pages 186-190.
(2) Stephen Wheatcroft (World Travel and Tourism Council), Measuring the Performance of the Transport Industry, Appendix.
(3) Simard and Hill, cited in Stephen Smith, A Tourism Handbook, pages 32-37.

## SECTION 3: THE TOURISM SATELLITE ACCOUNT

### 3.1 Overview of the Tourism Satellite Account

The Tourism Satellite Account (TSA) is a diverse, integrated database that shows, for the first time, the economic importance of specific sectors of the tourism industry in B.C. At its centre is an input-output model which shows the contribution of major "core tourist industries" and "tourist-related industries" to the total B.C. economy. Complementing the I-O model is an extensive database, currently in development, which presents non-monetary statistics on all significant and measurable aspects of tourism from both the supply and demand sides. The TSA "highlights the multi-dimensional nature of tourism... and provides the ability to produce and systemize a large array of statistics in a comprehensive and consistent manner."[35] Altogether, the TSA places tourism into the context of the provincial economy and provides a consolidated database for an ongoing analysis of the industry and its growth potential.

### 3.2 The Need for a Tourism Satellite Account

For years, the growth of the western industrialized economies has been measured by traditional gauges -- the number of board feet of lumber produced, the number of new orders for manufacturing, building permits issued and so on. The national accounts have kept meticulous records of production in the primary and manufacturing sectors which were always considered to be the engines of growth. In the last decade, some researchers have begun to question this approach[36] because it over-emphasizes the importance of the production of tangible "things", perhaps because they are easily measured, and underestimates the contribution of services. The Canadian travel industry is bigger than the petroleum and steel industries combined[37], yet data on this broad sector is missing, fragmented, or aggregated to the level that it is of scarcely any real use. Many professionals in tourism research came to the conclusion that existing data sources and current national accounting methodology were inadequate to measure services, especially the tourism industry. A different, new approach was needed. It would need to be designed especially to measure this diverse industry. Rather than be separate from

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[35] Joycelyn Lapierre and Stewart Wells, A Proposal for a Satellite Account and Information System for Tourism, page 31.

[36] The work of economists Michael Downie and Nuala Beck was discussed by Bruce Little in "Tilting at Smoke Stacks", page B18.

[37] Idem.

existing data sources, the new approach must be integrated with them to ensure coverage and accreditation. The new approach was a Tourism Satellite Account for B.C.

## 3.3 Description of the Tourism Satellite Account

The TSA is a "satellite" of the input-output model of the B.C. economy. It provides the only mechanism for looking at the interrelationships between tourism and non-tourism industries simultaneously. Like a model within a model, it uses the same structure of "make" and "use" matrices as the provincial I-O model, but the TSA disaggregates the usually broad service categories in order to present income and expenditure data for 17 individual accommodation and food services sectors and 20 categories for recreation and transportation. In the same way the moon is a satellite of the earth and both are affected by mutual forces, the tourism input-output model is a "satellite" of the provincial I-O model.

## 3.4 History of the B.C. Tourism Satellite Account

Although input-output models have been used internationally since the 1960s, there are very few examples of specific I-O models for tourism. Tourism Satellite accounts have been proposed by the World Tourism Organization (1983), France (1983), OECD (1984), and Canada(1985)[38]. Researchers in many other countries have used modified national I-O accounts to focus on sub-divisions of the tourism industry[39].

British Columbia joined the forefront in this field when it proposed a provincial tourism satellite account in 1987. It recognized that a TSA would be a valuable tool for analyzing an important part of the B.C. economy. Some were hesitant to undertake a provincial TSA, believing that the national TSA was "in the works". However, because of the prominence of the tourism industry in the B.C. economy, in 1989, the decision was made to go ahead with the provincial model. The first round of results from the B.C. Tourism Satellite Account were published in August of 1991, and are poised to make a significant contribution to the tourism industry. They have produced 1988 industry benchmarks

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[38] Joycelyn Lapierre and Stewart Wells, A Proposal for a Satellite Account and Information System for Tourism, page 18.

[39] Discussions of examples in some developing countries including Korea, Hong Kong, Philippines, Gibraltar, Jamaica are presented in John Fletcher's Input-Output Analysis and Tourism Impact Studies, Annals of Tourism Research, V.16, #4, 1989, page 514-529.

which will be used for comparison in future years. Meanwhile, the Statistics Canada TSA is still in the proposal stage.

### 3.5 Scope of the Tourism Satellite Account

The TSA is designed to consolidate information on "all the economic, socio-economic and demographic phenomena relating to the supply and demand of goods and services to facilitate business, pleasure and leisure activities away from home"[40]. Because it uses the classification scheme and definitions of the SNA and the same structure of "use" and "make" matrices as the provincial I-O model, the TSA permits comparisons between the tourism industry and other major industries in terms of size, performance and contribution to GDP[41]. It capitalizes on the reputation of the SNA which "lends the required credibility to the economic data on tourism"[42]. In addition, although the creation of a national or provincial I-O model is a costly undertaking, once it is in place, it is relatively inexpensive to create a satellite account that uses the same structure and methodology.

The monetary data in the tourism satellite I-O model is only the first level of information in the TSA. Other levels, in development, form a diverse database which includes summaries of a wide array of quantitative and statistical information relating to the demand and supply sides of tourism. The model proposed by Statistics Canada will have four layers of information: (1) the monetary data in the tourism I-O model, (2) quantitative data summarizing available statistics relating to the demand and supply side of tourism, (3) characterization data which describe characteristics of tourism commodities, the tourism labour force and data from tourist surveys, and (4) information relating to tourism planning and the analysis of information[43]. Figure 3A presents a summary of the Statistics Canada proposal.

### 3.6 Structure of the TSA Input-Output Model

The TSA I-O model presents the "use", "make" and "final demand" matrices for 39 individual sectors in the core tourism and tourism-related industries. In many cases,

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[40] Joycelyn Lapierre and Stewart Wells, A Proposal for a Satellite Account and Information System for Tourism, page 13.

[41] Ibid, page 23.

[42] Idem.

[43] Joycelyn Lapierre and Stewart Wells, A Proposal for a Satellite Account and Information System for Tourism, page 29.

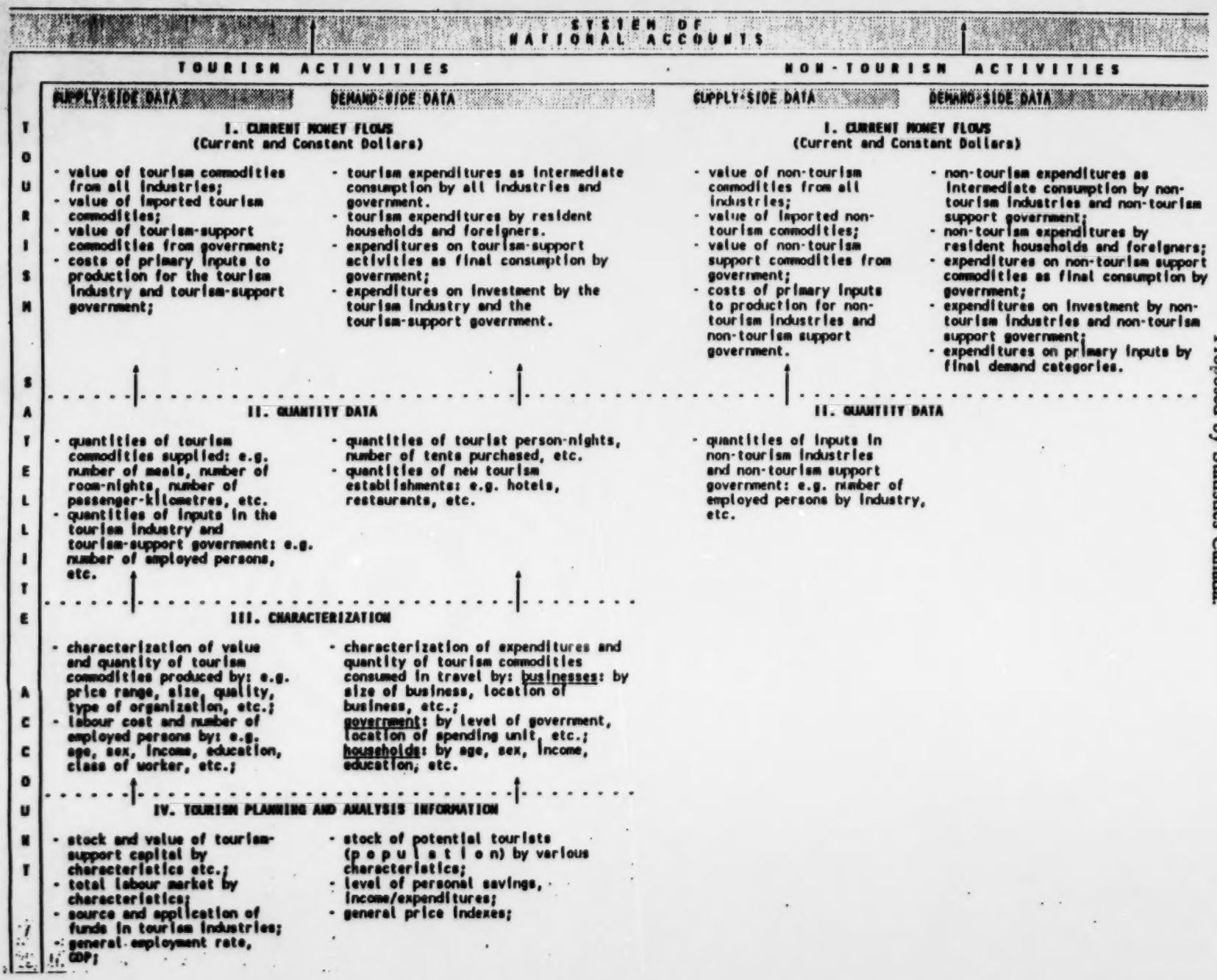
SYSTEM OF NATIONAL ACCOUNTS
TOURISM ACTIVITIES
NON-TOURISM ACTIVITIES
SUPPLY-SIDE DATA
DEMAND-SIDE DATA
SUPPLY-SIDE DATA
DEMAND-SIDE DATA
TOURISM SATELLITE ACCOUNT
I. CURRENT MONEY FLOWS (Current and Constant Dollars)
- value of tourism commodities from all industries;
- value of imported tourism commodities;
- value of tourism-support commodities from government;
- costs of primary inputs to production for the tourism industry and tourism-support government;
- tourism expenditures as intermediate consumption by all industries and government.
- tourism expenditures by resident households and foreigners.
- expenditures on tourism-support activities as final consumption by government;
- expenditures on investment by the tourism industry and the tourism-support government.
I. CURRENT MONEY FLOWS (Current and Constant Dollars)
- value of non-tourism commodities from all industries;
- value of imported non-tourism commodities;
- value of non-tourism support commodities from government;
- costs of primary inputs to production for non-tourism industries and non-tourism support government.
- non-tourism expenditures as intermediate consumption by non-tourism industries and non-tourism support government;
- non-tourism expenditures by resident households and foreigners;
- expenditures on non-tourism support commodities as final consumption by government;
- expenditures on investment by non-tourism industries and non-tourism support government;
- expenditures on primary inputs by final demand categories.
II. QUANTITY DATA
- quantities of tourism commodities supplied: e.g. number of meals, number of room-nights, number of passenger-kilometres, etc.
- quantities of inputs in the tourism industry and tourism-support government: e.g. number of employed persons, etc.
- quantities of tourist person-nights, number of tents purchased, etc.
- quantities of new tourism establishments: e.g. hotels, restaurants, etc.
II. QUANTITY DATA
- quantities of inputs in non-tourism industries and non-tourism support government: e.g. number of employed persons by industry, etc.
III. CHARACTERIZATION
- characterization of value and quantity of tourism commodities produced by: e.g. price range, size, quality, type of organization, etc.;
- labour cost and number of employed persons by: e.g. age, sex, income, education, class of worker, etc.;
- characterization of expenditures and quantity of tourism commodities consumed in travel by: businesses: by size of business, location of business, etc.;
government: by level of government, location of spending unit, etc.;
households: by age, sex, income, education, etc.
IV. TOURISM PLANNING AND ANALYSIS INFORMATION
- stock and value of tourism-support capital by characteristics etc.;
- total labour market by characteristics;
- source and application of funds in tourism industries;
- general employment rate, GDP;
- stock of potential tourists (population) by various characteristics;
- level of personal savings, income/expenditures;
- general price indexes;

Figure 3A:
The Four Layers of Information in the Tourism Satellite Account
Proposed by Statistics Canada.

especially in the hotel and restaurant sectors, the TSA provides more accurate, and more detailed information than its provincial counterpart.

The value of the inputs "used" and the value of the tourist commodities "made" are summarized in the "use" and "make" matrices for each sector. The "make" matrix shows the specific services produced by each sector. Figure 3B presents a summary of the make matrices for two examples, large hotels and botanical gardens. Large hotels report a wide variety of services in their make accounts because the hotels frequently offer luggage storage facilities, telephone services, conference rooms, in-room video rentals, video arcades, and restaurants in addition to accommodation. In comparison, the make account for botanical gardens is relatively straight forward. In addition to their main income earner, amusement and recreation services, these gardens produce output in only three other categories, retail margins in their gift shops and meals and margins on alcoholic beverages served in their restaurants.

The "use" matrix reports the value of all inputs used in the production of the tourism commodities. Figure 3C presents a summary of the use matrix for the large hotels. The first part of a use matrix divides inputs into the broad categories of intermediate goods and services from agricultural products to postal services, and links these inputs with the input-producing industries in the provincial I-O model. This is an important function of the use matrix since it shows the interdependencies in the economy and highlights the industries that would be affected by an increase in tourism.

The second part of a "use" matrix summarizes the value-added produced by the sector. Value-added is composed of the wages, salaries and other labour costs such as employer-paid benefit packages and "operating surplus" which is the EBIDT (earnings before interest, depreciation and taxes). Altogether, the value-added shows the direct impact of a tourism sector on the B.C. economy.

The third set of TSA matrices present "final demand". They summarize the total demand or expenditures made by the individuals who rented boats, bought meals or paid admission fees. The final demand is measured in purchaser prices which reflect the prices, including commodity taxes, paid by the business when it purchased the inputs.

### 3.7 The Importance of the TSA Input-Output Model

The TSA is an important policy and planning tool for all businesses, organizations and governments associated with tourism. It presents a detailed and accurate picture of the tourism industry, and measures the direct economic impact that the expenditures, payroll

Figure 3B:
Examples of "Make" Matrices for Large Hotels (250+ rooms) and Botanical Gardens from the Tourism Satellite Account for British Columbia.

| MAKE MATRIX | Hotels: 250+ Rooms |
|---|---|
| PRINTING & PUBLISHING | 0 |
| TRANSPORTATION & STORAGE | 2,606,065 |
| RADIO & TELEVISION BROADCASTING | 1,272,326 |
| TELEPHONE & TELEGRAPH | 8,049,983 |
| RETAIL MARGINS | 855,741 |
| OTHER FINANCE,INS.,REAL ESTATE | 8,027,225 |
| BUSINESS SERVICES | 58,230 |
| AMUSEMENT & RECREATION SERVICE | 4,197,235 |
| ACCOMMODATION & FOOD SERVICES | 289,735,056 |
| Accommodation | 167,289,946 |
| Meals | 93,825,717 |
| Service Margins on Alcoholic Beverages | 28,619,394 |
| Non LRS | 28,594,067 |
| LRS | 25,327 |
| OTHER PERSONAL & MISC. SERVICE | 3,688,591 |
| TOTAL MAKE | 318,490,451 |

| MAKE MATRIX | Botanical Gardens |
|---|---|
| PRINTING & PUBLISHING | 0 |
| TRANSPORTATION & STORAGE | 0 |
| RADIO & TELEVISION BROADCASTING | 0 |
| TELEPHONE & TELEGRAPH | 0 |
| RETAIL MARGINS | 3,502,410 |
| OTHER FINANCE,INS.,REAL ESTATE | 0 |
| BUSINESS SERVICES | 0 |
| AMUSEMENT & RECREATION SERVICE | 8,437,571 |
| ACCOMMODATION & FOOD SERVICES | 2,484,579 |
| Accommodation | 0 |
| Meals | 2,445,140 |
| Service Margins on Alcoholic Beverages | 39,438 |
| OTHER PERSONAL & MISC. SERVICE | 0 |
| TOTAL MAKE | 14,424,560 |

Figure 3C:
An Example of a "Use" Matrix for Large Hotels (250+ rooms)
from the Tourism Satellite Account for British Columbia.

| USE MATRIX | Hotels: 250+ Rooms |
|---|---|
| AGRICULTURAL PRODUCTS | 2,298,904 |
| FORESTRY PRODUCTS | 30,896 |
| FISH LANDINGS | 84,615 |
| NATURAL GAS | 379,777 |
| FOOD | 20,161,232 |
| MANUFACTURING | 12,504,293 |
| REPAIR CONSTRUCTION | 562,008 |
| PIPELINE TRANSPORTATION | 203,697 |
| TRANSPORTATION & STORAGE | 7,065,315 |
| RADIO & TELEVISION BROADCASTING | 1,301,671 |
| TELEPHONE & TELEGRAPH | 5,896,826 |
| POSTAL SERVICES | 670,217 |
| ELECTRIC POWER | 3,914,884 |
| OTHER UTILITIES | 2,514,034 |
| WHOLESALE MARGINS | 2,289,212 |
| RETAIL MARGINS | 291,743 |
| OTHER FINANCE,INS.,REAL ESTATE | 19,294,005 |
| BUSINESS SERVICES | 3,440,581 |
| EDUCATION SERVICES | 197,676 |
| AMUSEMENT & RECREATION SERVICE | 2,558,394 |
| ACCOMMODATION & FOOD SERVICES | 516,891 |
| OTHER PERSONAL & MISC. SERVICE | 9,829,293 |
| TRANSPORTATION MARGINS | 983,022 |
| OPERATING, OFFICE, LAB. & FOOD | 2,800,596 |
| TRAVEL, ADVERTISING & PROMOTION | 8,919,571 |
| INDIRECT TAXES | 20,192,810 |
| WAGES & SALARIES | 121,268,869 |
| SUPPLEMENTARY LABOUR INCOME | 13,369,641 |
| NET INCOME UNINCORP. BUSINESSES | 0 |
| OTHER OPERATING SURPLUS | 54,949,780 |
| TOTAL OUTPUT | 318,490,451 |
| TOTAL INPUT | 128,902,161 |
| GDP (INC) | 189,588,290 |
| GDP (VALUE ADDED) | 189,588,290 |
| GDP TO OUTPUT RATIO | 0.60 |
| TOTAL EMPLOYMENT | 4,349 |
| WAGES & SALARIES PER EMPLOYEE | 27,883 |
| TOTAL REVENUES (total output+cost of alc.) | 329,187,946 |
| TOTAL EXPENSES (total input+cost of alc.) | 139,599,656 |

income and jobs related to tourism have on the B.C. economy[44]. It has also calculated, in detail, the total indirect taxes that tourism generates for the three levels of government.

The level of detail in the TSA provides important information on the different economic impacts from tourist spending in different types of hotels and restaurants. The pattern of investment or purchases in a large hotel or a small hotel are obviously very different, yet before the TSA all hotels were lumped together, regardless of size. Tourist surveys have calculated daily expenditure on hotel accommodation, but the difference between spending $100 in a large hotel and $100 in a small hotel could not be measured until the TSA. A large portion of the TSA's hotel sector data was obtained directly from the financial statements of individual businesses. The TSA would not have been possible without the voluntary co-operation of the business community. Data from the large hotels has enabled the TSA to prepare detailed "norms" for the large hotel sector, which can assist with the evaluation of the location or financing of a proposed hotel development.

Unfortunately, the first round of TSA data collection did not receive sufficient regional data to provide analyses of regional impacts. When a representative sample of financial statements is obtained, regional TSA results will be able to assist planners, businesses and governments in determining the feasibility of and site selection for tourism facilities and tourism supporting infrastructure throughout the province[45].

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[44] The sources of data used in the preparation of the TSA are described in detail in The Tourism Satellite Account: Methodology and Results, prepared by Pacific Analytics for the Ministry of Tourism, July 31, 1991.

[45] William R. Flemming and Lorin Toepper, Economic Impact Studies: Relating the Positive and Negative Impacts to Tourism Development, page 37.

## PART 2: THE DIRECT ECONOMIC IMPACTS OF B.C.'S TOURISM INDUSTRIES

There are three steps in estimating the economic impact of tourism industries: (1) definition of the tourism industries, (2) measurement of their output and (3) estimation of the tourism ratios and total spending by tourists. The first step, the identification of tier 1 and tier 2 tourism industries was discussed in section 2.5.

The second step, the measurement of the economic contribution from these industries, is a complex task. The TSA has measured, for the first time, the value of the GDP, wages and taxes paid by a major portion of these tourism industries. The TSA results will be discussed individually for accommodation, food and beverage, recreation and entertainment and selected transportation sectors in sections 4 to 8. However, due to data limitations, the TSA did not attempt to measure the output of all sectors in the tourism industries. A general discussion of the Non-TSA tourism industries is presented in section 9. Appendix 2 presents a list of the number of operations in tourism-related industries by size of employment.

Altogether, a detailed and relatively accurate view of the economic impact of the tourism industries can be determined. However, this is not the same as the economic impact of all tourist spending since many of these industries serve both tourists and local residents. From a supply-side approach which is concerned with total output rather than the characteristics of the consumers, this distinction is not important. The value of a meal served in a hotel restaurant is the same regardless of whether it was eaten by a tourist or a local resident. The supply-side approach is concerned with the economic impact of the tourism industries as a whole; however, for planning, development and promotion purposes, there is also a need to estimate the tourism component of the output. Therefore, each economic impact section concludes with a discussion of tourism ratios.

## SECTION 4: THE ACCOMMODATION SECTOR

### 4.1 Overview of findings

Up to twenty-seven percent of every tourist dollar is spent on accommodation[46]. B.C.'s 74,000 rooms, in large hotels to small guest ranches, earned $1.7 billion in revenues in 1988. Figure 4A presents a summary of the TSA data for the accommodation sector. The accommodation sector produced nearly $1 billion in GDP, which is twice the value of the B.C. coal industry. Out of every $100 of output, the accommodation sector produced $63 in value-added, compared to only $34 of GDP produced by the forestry industry, for example. Labour employed in the accommodation sector earned $560 million, and contrary to much lower averages published by Statistics Canada, the TSA's detailed study of the large hotel sector (hotels with 250+ rooms) found that the average earnings including gratuities were $25,500 per full time employee (FTE) in the "rooms" operations of the hotels.

The accommodation sector paid more than $276 million in indirect taxes[47] in 1988, or more than 16 cents out of every dollar of revenue. The provincial government received the largest portion, $180 million; the municipal and federal governments collected over $55 million and $40 million, respectively. Surprisingly, over 46% of all revenue in the accommodation sector is earned from meals and service margins earned on alcoholic beverages. Therefore, although room taxes accounted for $44 million, the largest source of government revenue, by far, was the more than $155 million in taxes related to the sale of alcoholic beverages. In addition to over $50 million in alcohol taxes on alcoholic beverages served, every alcohol purchase contains another level of taxation that is hidden in the Liquor Distribution Branch's wholesale prices. Altogether, the accommodation sector paid an additional $107 million in these "hidden taxes" which increases the total indirect tax burden, before income taxes, to 16% of total revenues.

The 1989 and 1990 estimates of the direct economic impacts for hotels and motels can be estimated from the TSA and B.C. room revenue accommodation data[48]. Using this

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[46] Visitor '89, page 37.

[47] Indirect taxes are the taxes that are included in the final price paid by the consumer such as property taxes, license fees, the hotel tax, alcohol tax, excise and import taxes. The $276 million does not include taxes on labour such as CPP and UIC payments.

[48] Assuming that the proportion of room revenue to total GDP generated remained constant from year to year, a likely assumption, then the 1989 and 1990 room revenue data for hotels and motels can be used as the basis for estimating values for following years.

Figure 4A
SUMMARY OF THE TSA RESULTS FOR ACCOMMODATION
(millions of dollars)

| ACCOMMODATION | REV. | OUTPUT | WAGES | GDP | GDP/O | T.R. |
|---|---|---|---|---|---|---|
| HOTELS: | | | | | | |
| 250+ rooms | 329 | 318.5 | 121.3 | 189.6 | 0.60 | H |
| 151 - 250 | 124 | 118.0 | 43.6 | 75.2 | 0.64 | H |
| 76 - 150 | 292 | 256.2 | 100.5 | 173.1 | 0.68 | H |
| 0 - 75 | 446 | 368.9 | 156.8 | 251.9 | 0.68 | M |
| beverage hotels | 179 | 120.9 | 46.0 | 81.3 | 0.67 | L |
| HOTEL TOTALS | 1370 | 1182.5 | 468.2 | 771.1 | 0.65 | |
| MOTELS | 132 | 130.9 | 34.9 | 78.3 | 0.60 | H |
| VACATION RENTALS | 44 | 41.8 | 10.8 | 20.7 | 0.50 | H |
| ADVENTURE TRAVEL | | | | | | |
| Guide Outfitters | 21 | 20.9 | 7.9 | 12.0 | 0.57 | H |
| Freshwater fish. | 25 | 25.0 | 8.2 | 14.3 | 0.57 | H |
| Saltwater fishing | 54 | 53.9 | 13.9 | 28.6 | 0.53 | H |
| Guest Ranches | 8 | 7.6 | 2.4 | 4.4 | 0.58 | H |
| ADVENTURE TOTALS | 108 | 107.5 | 32.4 | 59.2 | 0.55 | H |
| PRIVATE CAMPGROUNDS | 57 | 56.0 | 13.2 | 31.8 | 0.57 | H |
| ACCOMMODATION TOTALS | 1,710 | 1,518.6 | 559.6 | 961 | 0.63 | |

REV. = Revenues = total output + cost of alcohol purchases from the BC Liquor Distribution Branch.
GDP/O = GDP to Output ratio
T.R. = tourist ratio = the % of total output attributed to tourism
H = High M = Medium L = Low

Source: Tourism Satellite Account results, July 1 1991. (1988 data)

data, the hotel and motel sector's GDP increased from $920 million in 1988 to an estimated $1.0 billion in 1989, and $1.1 billion in 1990. The 9.6% growth between 1988 and 1989 was slightly below the provincial average. However, between 1989 and 1990, while the B.C. GDP grew at only 6.2%, the 10% growth in the hotel and motel sector helped to counteract the downturn experienced in forestry and the industrial sectors.

## 4.2 Summary of Hotel Sector

B.C.'s 650 hotels generated $1.4 billion in revenues, purchased $411 in inputs and produced approximately $771 million in GDP in 1988, which was equal to the total GDP earned in B.C.'s petroleum, natural gas and coal mining industries. Hotels are generally labour intensive, paying a total of $468 million, 55% of their value-added, in wages and salaries. In general, they produced $65 in GDP out of every $100 of output.

Hotels paid over $240 in indirect taxes in 1988. The hotel room tax accounted for $34 million, however, the largest portion of the total tax burden, $152 million was related to the sale of alcoholic beverages. In total, more than 17% of total hotel revenues went to the three levels of government in indirect taxes. This is in addition to the personal and business income taxes generated in this sector.

## 4.3 Analysis of Hotel Sector by Size of Hotel

The large hotels (250+ rooms) produced almost 25% of the hotel sector's GDP in 1988. Their economic effect is confined exclusively to the lower mainland, Vancouver, Victoria and Whistler. Even though the hotels require a large capital investment in construction, they generated a large value-added, $190 million in 1988 including $121 million in wages and salaries. The resulting GDP-to-output-ratio is .60 which, although lower than other sizes of hotels and motels, is still significantly higher than the other non-tourism industries such as forestry. Expressed another way, they add $1.44 in value-added to every $1 of inputs. The large hotels also create an important spillover effect on the local stores and businesses. Since their patrons are in the higher income groups, their expenditures in surrounding stores, car rental agencies, ski lodges and in other businesses catering to tourists are significant.

The medium size hotels (76 to 250 rooms) offer 25% of B.C.'s hotel rooms all across the province. In 1988, they produced almost $250 million in GDP and paid $144 million in wages and $60 million in indirect taxes from $416 million in revenues. Their GDP-to-output-ratios were .64 for 151 to 250 room hotels and .68 for smaller hotels with 75 to 150 rooms.

In the hotel sector, the largest direct economic impact, $252 million, came from the small hotels (75 or less rooms). These small family owned and operated hotels are labour intensive and earn almost 72% of their revenues from meals and service margins on alcoholic beverages. The alcohol-related taxes raised their total indirect tax payments to $86 million. On average, value-added accounts for $68 of every $100 of output, one of the highest GDP-to-output-ratio in the TSA. Many studies have shown that these small businesses also have the highest multiplier effects on the local economy because they have large wages and profit components, are owned by local people, and purchase their inputs from local producers and suppliers[49]. The small hotels are important components of the accommodation industry in the Kootenay, Cariboo, North Coast and Netchako development regions[50].

Non-conforming hotels account for less than 1% of accommodation room revenues. These are beverage hotels, and they serve almost 15% of the province's alcoholic beverages. They produced over $120 million in output in 1988 and contributed $81 million to the province's GDP, including $46 million in wages and salaries, mainly from their main source of revenue -- alcoholic beverages. In addition, many beverage hotels and small hotels have off-licence sales outlets. As a result, alcohol related taxes accounted for 92% of their total indirect tax bill of $50 million.

## 4.4 Motels

There are approximately 750 motels in the province. They are an important form of accommodation for tourists from Alberta, Washington, Oregon and B.C. itself since as many as 75% travel by car or RV[51]. Altogether, motels generated $131 million in total output and added $78 million to the province's GDP. Labour earned $35 million in wages and salaries, and motels paid a total of $17 million in indirect taxes and hidden alcohol taxes.

Generally, motels are small, with less than one quarter earning over $250,000 annually[52]. However, they differ considerably in size, and the pattern of expenditure is quite different for large and small establishments. With food and beverage receipts making up only 23% of their total revenues, small motels are clearly more dependent on

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[49] M. Brownrigg and M.A. Greig, Differential Multipliers for Tourism, page 267.

[50] The economic development regions are slightly different from the definitions of tourism regions.

[51] Visitor '89, Resident Travel in B.C.

[52] Pacific Analytics, The Tourism Satellite Account: Methodology and Results.

accommodation revenue than larger motels and hotels. The TSA survey data suggested that the GDP-to-output-ratio for smaller motels was lower, approximately .54 compared to .63 for those earning over $250,000 because they had significantly lower food and beverage sales, fewer recreational facilities and lacked economies of scale.

## 4.5 Employment in the Hotel and Motel Sectors

The accommodation industry, and the tourism industry as a whole, requires skilled workers and trained managers, and creates employment for a large number of unskilled workers[53]. In recent years, the accommodation sector has accounted for the largest growth in the tourism labour force[54]. Statistics Canada estimated that there were over 21,300 workers employed in B.C.'s hotels and motels in 1988[55]. Nearly 35% of the positions are part-time. Women make up almost 75% of the accommodation workers; only 30% of the women work full-year compared to 44% of the men[56]. Appendix 2 presents the accommodation by size of employment to show the relative size of establishments in this sector.

Using census data, Statistics Canada estimated that the average income in the accommodation occupations[57] was estimated to be under $16,000 for full-year workers in 1985, well below the average of $20,500 for all service occupations and $32,600 for forestry and logging occupations. The TSA survey of the large hotels collected data on employment numbers and income that challenges the Statistics Canada estimates. The TSA found that the average 1988 earnings for employees in the "rooms" operations of these hotels was $25,500 per full time equivalent (FTE). The striking difference between the two estimates can be explained by two factors. First, most of the accommodation occupations in large hotels are unionized. Second, the TSA also estimated the value of gratuities and included them in the total wage and salary calculations. The 250+ hotel category, however, is not typical of the whole accommodation industry. In any case, the TSA data does indicate that the actual average earnings in the hotel and motel sector is higher than the published figures.

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[53] David L. Edgall, International Tourism Policy, page 27.

[54] Michael Cote, The Tourism Labour Force, Touriscope 1988, page 127.

[55] Statistics Canada data, SIC 9111, Hotels and Motor Hotels.

[56] Statistics Canada, 1986 Census Data, catalogue 93-116.

[57] This is the 613 SOC classification for occupations in lodging and other accommodation.

## 4.6 Summary of Other Accommodation

Vacation Rentals, Guide Outfitters, Freshwater and Saltwater fishing, Guest Ranches and Private Campgrounds are other forms of accommodation in the TSA which classifies activities according to the main source of income[58]. Of course, these sectors offer a variety of services for tourists in addition to accommodation and food services. Many of these businesses are "destinations" for the tourist who plans a vacation around a stay at a guest ranch or an outdoor expedition. These businesses, therefore, help to attract tourists away from the central tourist regions in Vancouver Island and Southwest B.C. Because tourists generally must travel further to reach these destinations, they take longer vacations on average, consequently adding to their total travel expenditures.

Although Vacation Rentals, Guide Outfitters, Freshwater and Saltwater fishing, Guest Ranches and Private Campgrounds altogether account for only 13% of the total accommodation expenditures, they still contribute an important $208 million in output and $112 million in value-added to the B.C. economy and pay $19 million in indirect taxes. Their GDP-to-output-ratios are between a high of .58 for guest ranches and .50 for vacation rentals.

## 4.7 Vacation Rentals

Not surprisingly, more than 70% of the $44 million revenues of vacation rentals was earned from providing accommodation services. On average, value-added made up only 50% of their output, the lowest ratio in the accommodation sector. Despite their size, the vacation rentals paid over $9 million in indirect and hidden alcohol taxes to the three levels of government.

## 4.8 Guide Outfitters

The direct economic impact of B.C.'s Guide outfitters was over $12 million in GDP in 1988 from output of $21 million. Their indirect impact was significant since they

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[58] In the B.C. room revenue data guest ranches, adventure hunting and other types of outdoor adventure, bed and breakfast, and houseboats are classified under "miscellaneous" which includes rooms that are rented in universities, mines, farms or other rooms that may be found for tourist use where the primary focus is not accommodation. However, in the provincial I-O model and the TSA, the revenues from renting rooms in these businesses would be included in their general revenues under the classifications of education, mining, farming etc. For example, B.C. ferries and other water transportation provide $860,000 in accommodation. This is included in the Urban and Water Transportation category.

purchased over 95% of their inputs in B.C.[59] The exception was part of their $730,000 in travel, advertising and promotion expenditures which were spent outside the province. On average, each $100 of output generated $57 in value-added. In addition, their investments totalled $64 million in purchase prices, or about $3 of investment for every $1 of annual revenue earned, a high ratio by tourism and outdoor recreation standards[60].

The Guide Outfitter sector paid almost $8 million in wages and salaries in 1988. The 1989 Guide Outfitters study estimated employment at 1740 positions, including 255 guides, 910 assistant guides, 450 camp helpers and 125 others[61]. The guide outfitter operation is very seasonal, producing on average 6 months of employment from April to October. The sector study calculated an average income of $18,000 per worker, but this probably underestimates the average earnings for two reasons. First, many of the businesses are owner-operated and the distinction between wages and operating surplus is arbitrary. Second, the study divided total wages paid by the number of person-years. This approach does not take individual occupations, gratuities, or seasonality into consideration.

The Guide Outfitters produce a significant injection into regional economies. More than 71% of their revenues are earned in the North by Northwest, Peace River and Cariboo Tourist Regions[62]. They are important customers for air charter operators in more remote regions of the province.

## 4.9 Freshwater Fishing

The total output of B.C.'s 206 freshwater fishing resorts was $25 million in 1988. Overall, they contributed more than $14 million to the provinces GDP for a GDP-to-output-ratio of .57. Their purchase of $11 million in inputs had a large indirect effect on the economy since 95% of their inputs are purchased in the province[63]. The resorts paid almost $3 million in indirect taxes to the three levels of government in addition to the income taxes. The majority, $2 million, was in licence fees.

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[59] Additional information was obtained from Guide Outfitters of B.C.: Opportunity Analysis, prepared by the DPA Group, 1989.

[60] Ibid, page 3-9.

[61] Ibid, page 3-7.

[62] The regions used in the Guide Outfitter study do not correspond exactly to the provincial tourist regions.

[63] TSA data were supplemented by information in the two sector studies: A Marketing and Development Plan for the Freshwater Fishing Resorts of B.C. and Fishing Lodges and Resorts in B.C.

The freshwater fishing resort group is diverse, ranging from "fly-in full service" facilities to smaller, family-oriented resorts. The larger operations would have a slightly smaller impact on the local economies since they spend proportionally more on both transportation and promotion outside the province.

## 4.10 Saltwater Fishing

Saltwater fishing lodges produced $29 million in direct economic effects in Vancouver Island and the northern B.C. coastal regions in 1988 from output of $54 million. Of the $25 million in inputs, more than 50% was spent on food and transportation. Indirect taxes, including the hidden alcohol tax, totalled almost $2.5 million. The saltwater fishing lodges contributed approximately $15 million in wages and salaries, and altogether it produced $53 of value-added for every $100 of output. The impact on the B.C. economy is related to size of operation: large operators produce a lower multiplier since they spend 62% of their operating budget outside the province compared to 75% of the smaller operators[64].

In 1989, there were 60 full service and 20 economy lodges in the saltwater fishing sector. The saltwater fishing season is seasonal, producing a peak employment of 1750 jobs in the summer. About 77% of the jobs were full time, but the results vary according to the size of the operation. The full service lodges employ an average of 28 people in the summer compared to only 5 positions in the economy category. The diversity of the sector makes it difficult to calculate average earnings per worker. Factors such as free room and board, gratuities and the part-time nature of the job tends to make any calculation an underestimation.

The main impact of the saltwater fishing industry is on Vancouver Island around the Campbell River area where 43% of the lodges are located. An additional 23% are on the northern B.C. coast around Prince Rupert.

## 4.11 Guest Ranches

In 1986, tourists stayed over 100,000 nights in B.C.'s 34 guest ranches[65]. The TSA estimated that, in 1988, this accommodation sector produced almost $8 million in output.

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[64] The TSA data were supplemented by information in the sector study: Marine Tourism in B.C.: Opportunity Analysis.

[65] Information on the characteristics of B.C.'s guest ranches was taken from Guest Ranches of British Columbia: Product and Market Analysis.

Although located in every tourist region, 50% are centred in the High Country and the Cariboo. In terms of direct economic impacts, Guest ranches generated $4.4 million in GDP or $58 of value-added in every $100 of output. Altogether, they purchased over $3 million in inputs, paid $242,000 in indirect taxes, and paid $2.4 million in wages and salaries. Approximately 80% of the employment is full-year and of that 70% is full-time. This is a high proportion for a sector that is predominately a summer activity.

### 4.12 Private Campgrounds

There is a significant difficulty in arriving at estimates for campgrounds. First, since the values of municipal, provincial and federal campground operations are included in the input-output matrix for the three levels of government, only the value of the private campgrounds is included in the TSA data. Second, information cannot be estimated from the *Visitor 89* or *B.C. Resident* surveys because those surveys did not identify campground by type (private or public). Third, the valuable information in the provincial accommodation tax records is not applicable since campgrounds are not subject to these taxes[66]. And fourth, Statistics Canada only measures the 38 large operations which earn over $250,000 annually and omits approximately 700 smaller establishments. As a result, the TSA used a variety of estimation procedures to arrive at the final data in the input-output model and concluded that it is, at best, an underestimation.

Given these caveats, private campgrounds produced $56 million in output in 1988 and added $32 million to the province's GDP. They received $62,000 in subsidies and paid approximately $3.5 million in indirect taxes, more than half of which was for property taxes. Once set up, the campgrounds require relatively few inputs, resulting in a relatively low .57 GDP-to-output-ratio. The economic impact from campgrounds is spread across the province but restricted to the summer months of operation.

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[66] Some campgrounds which rent cabins do pay the accommodation tax. In 1988, this tax accounted for $500,000.

## 4.13 Estimation of Tourist Expenditures

The accommodation sector earned $1.8 billion in revenues in 1988. This is the total spending in hotels, motels and other accommodation facilities by both tourists and local residents. In order to determine the economic impact of tourism, the proportion of these revenues that comes from tourists must be estimated. This is not an easy task because businesses in the accommodation sector offer a variety of services.

Based on room taxes paid, provincial accommodation data measured room revenues at $670 million in 1989. However, according to *Visitor '89* and the *B.C. Resident* Study, tourists in B.C. spent a total of $1.1 billion on lodging in 1989. Neither estimate is the "correct" one. Room revenue excludes both other forms of accommodation that do not pay room taxes and the tourist expenditures made in the accommodation's restaurant and retail operations. The B.C. demand side tourism studies' estimates of accommodation expenditure included the value of hostess gifts purchased by tourists staying with friends[67].

The National Task Force on Tourism Data suggested that tourists account for 86% of accommodation expenditures. This would imply that the tourist component of the accommodation sector was $1.5 billion, however, such ball park estimates are certain to be incorrect. The TSA data provides the first step with which a more precise calculation can be made. All of the "accommodation services" in the final demand matrices can be attributed to tourism. Radio and television broadcasting (movies in hotel rooms) and telephone and telegraph would probably have a very high tourism component near 100%. However, other categories in the hotel's make matrix such as amusement and recreation services (which includes health clubs), meals and service margins on alcoholic beverages are certain to have a larger non-tourist component since locals use these facilities. Although the National Task Force on Tourism Data produced tourism ratios of 15% for restaurants and 47% for amusement and recreation services, these estimates are again unreliable given the aggregation of the categories and the diversity of the accommodation industry across B.C.[68] Although it is difficult to estimate the tourism component of hotels and motels precisely, nearly all of the GDP produced in the other accommodation sectors (vacation rentals, guide outfitters, freshwater and saltwater fishing, guest ranches and private campgrounds) can be attributed to tourism. Using the tourism ratios from the

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[67] Over 37% of non-residents visitor nights and 46% of resident tourist visitor nights were spend with friends and relatives. Source: Visitor '89 and Resident Travel in B.C.

[68] Other estimates are even worse. The World Travel and Tourism Council uses an estimate that 29% of restaurants and accommodation and 35% of entertainment spending in the world are by tourists. These statistics actually form the basis of some international comparisons!

Task Force on Tourism Data, the estimate of output from tourist expenditures in the accommodation sector is around $1.1 billion. However, given the potential inaccuracies in the method of estimating tourism ratios, the categories of high, medium or low were used in figure 4A.

## SECTION 5: THE FOOD AND BEVERAGE INDUSTRY

### 5.1 Overview of Findings

Thousands of individual businesses make up this broad sector which includes licensed, unlicensed and take-out restaurants, caterers and taverns. In 1988 over $2.8 billion was spent in B.C.'s food and beverage industry. In terms of direct economic impacts, this sector of the economy contributed $1.3 billion to the province's GDP, equal to all residential construction in the province that year. It employed between 60,000 and 70,000 workers and paid $886 million in wages. In addition to almost $50 million in property taxes, licence fees, PST and other indirect taxes, the food and beverage sector paid another $195 million in alcohol related taxes. Figure 5A presents a summary of the TSA data for the food and beverage industry.

Although the food and beverage industry is an important part of the B.C. economy, there is little reliable information about it. This sector has not been fully surveyed since 1971[69]. Much smaller industries are surveyed annually, such as the varnish industry which has a GDP about 1/20th of the size of the food and beverage industry. Up to 1988 Statistics Canada estimates were "extrapolated forward projections" supplemented by a small survey of restaurants in the Vancouver area. Given the size of the survey and the lack of regional data, a high level of "unreliability" was eventually suspected and the series was suspended in March of 1988.

### 5.2 Licensed Restaurants

For every $100 of output, licensed restaurants produce $52 of value-added, the average for the food and beverage industry. They paid $553 million in wages and salaries including gratuities, which made up 40% of take-home pay. Licensed restaurants produced $1.6 billion in output, nearly 60% of the food and beverage industry, and over 50% of all meal revenue in B.C. Licensed restaurants earned 90% of their revenue from the sales of meals; they have a high indirect economic effect on the economy since agricultural products, fish landings and processed foods purchases make up for 55% of their non-alcohol purchases of inputs.

The TSA data for this sector are based on the actual alcohol purchase records for every licensed restaurant in B.C. Not surprisingly, they did not match the estimates from

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[69] The exception was a small follow-up survey in 1978.

Figure 5A
SUMMARY OF THE TSA RESULTS FOR FOOD AND BEVERAGE INDUSTRY
(millions of dollars)

| | REV. | OUTPUT | WAGES | GDP | GDP/O | T.R. |
|---|---|---|---|---|---|---|
| LICENSED RESTAURANTS | 1,563.6 | 1,495.1 | 552.7 | 781.6 | 0.52 | L - M |
| UNLICENSED RESTAURANTS | 524.0 | 524.0 | 145.7 | 242.6 | 0.46 | L - M |
| TAKE-OUT RESTAURANTS | 165.3 | 165.3 | 42.6 | 77.3 | 0.47 | L- ML |
| CATERERS | 174.9 | 174.9 | 43.6 | 85.1 | 0.49 | L |
| TAVERNS | 361.3 | 234.5 | 101.2 | 153.4 | 0.65 | L |
| FOOD+BEV TOTALS | 2,789.1 | 2,593.8 | 885.8 | 1,340.1 | 0.52 | |

REV. = Revenues = total output + cost of alcohol purchases from the BC Liquor Distribution Branch.

GDP/O = GDP to Output ratio
T.R. = tourist ratio = the % of total output attributed to tourism
H = High M = Medium L = Low

Source: Tourism Satellite Account results, July 1 1991. (1988 data)

Statistics Canada. Due to the methodology used, the TSA estimates are considered to be superior to other data. The TSA shows that licensed restaurants paid over $83 million in indirect taxes in 1988 which was over 5% of total revenues. Alcohol related taxes accounted for $65 million of the total.

### 5.3 Unlicensed Restaurants

Unlicensed restaurants produced 19% of the meal revenue in B.C. in 1988. Their total output was $524 million and they contributed almost $243 million in value-added including over $145 million in wages and salaries. Since they do not sell alcoholic beverages, they earn relatively lower profit margins than licensed restaurants, resulting in a GDP-to-output-ratio of .46, the lowest of the food and beverage industry. Another consequence is their low burden of indirect taxes; unlicensed restaurants pay $16 million in property taxes, licence fees and other indirect taxes, which accounts for only 3% of their revenue.

### 5.4 Takeout Restaurants and Caterers

Takeout restaurants and caterers produced 12% of B.C.'s meal revenue, approximately equal to the value of meals served in the total hotel sector. Although the GDP-to-output-ratio of .47 for take-out restaurants and .49 for caterers are lower than other restaurants, together they produced another $340 million in output for the provincial economy and added $162 million in GDP. They paid almost $4 million in indirect taxes and received under $300,000 in subsidies.

### 5.5 Taverns

Taverns, in contrast to other parts of the food and beverage industry, produced less than one percent of the provinces meal revenues but served almost 30% of B.C.'s alcoholic beverages. They also had the highest GDP-to-output-ratio of the industry, producing $65 in value-added out of every $100 of output. Taverns produced $153 million in value-added including $101 million in wages and salaries from over $360 million in revenues. Naturally the sale of alcoholic beverages in the taverns and "off sales" was the main source of income. While licensed restaurants earn an average $1 in margins on alcoholic beverages for every $10 worth of meals, the taverns (and the beverage hotels) earn $9 in alcohol margins. Because fewer other inputs are purchased, labour is a larger percentage of total costs, resulting in a higher GDP-to-output-ratio. Not surprisingly, the

tavern sector also paid the most in indirect taxes which totalled almost $140 million or 39% percent of their revenues. Alcohol related taxes accounted for $130 of this sum.

## 5.6 Employment in the Food and Beverage Industry

According to provincial 1990 estimates, the 110,000 people employed in the hospitality industry (20% in accommodation and 80% in food and beverage service occupations) earned $230 per week[70] or just less than half the average for the service industries. That figure implies that the hospitality worker would earn less than $12,000 per year. However, this rough average underestimates the total earnings in the hospitality industry and distorts the picture of its labour market. The 1985 census estimates for full-year workers in the food and beverage industry were considerably higher. In 1990 dollars, these full-year workers would earn $18,800 in the food and beverage occupations and $19,200 in accommodation occupations[71]. In contrast, the TSA estimated the full-time earnings in the "meals" operations of large hotels at $27,800 including gratuities. Although these latter figures may not be reflective of the entire industry, they do question the accuracy of the low earnings estimates.

It is difficult to have a clear picture of the food and beverage labour market without accurate data on the full-year, full-time workers in specific service occupations. Obviously, more accurate estimates might raise average earnings, but food and beverage occupations will still earn less than the more skilled trade occupations in forestry and other industries. Despite this, the hospitality industry is an important component of the labour market in creating jobs for the less skilled members of the labour force[72] [73].

## 5.7 Estimation of Tourist Expenditures

The World Travel and Tourism Council estimated that tourists account for 29% of total spending in the food and beverage industry. The National Task Force on Tourism Data set the proportion at 15%. The TSA estimated that the restaurants, caterers and taverns earned $2.8 billion in revenues with another $1 billion of meals and alcoholic beverages

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[70] B.C. Earnings and Employment Trends, monthly publication; Touriscope 1988, page 166.

[71] Real values were calculated using census data in Statistics Canada catalogue 93-116 and estimates of the B.C. consumer price index in Economic Statistics Report.

[72] Michael Cote, Visible Minority Workers in the Hospitality Industry.

[73] Michael Cote, Labour Shortage in the Hospitality Industry: Fact or Fiction?

classified under other TSA categories from hotels to golf courses[74]. *Visitor '89* and the *B.C. Resident* study estimated that overnight tourists in the province spent $1.2 billion on restaurant meals in 1989, with excursionists adding to this total. Combining the TSA and visitor surveys produces a tourism component around 30% which implies that $3 out of every $10 of food and beverage revenue was related to tourism. This estimate seems too high; however, any estimate is only a ball-park figure. The actual breakdown is directly related to the region and location of the business, the season and so on. The precise tourism ratio cannot be determined without a detailed survey of the "consumers" in the industry. In this study, the proportion of food and beverage expenditures attributable to tourism is set at low to medium for licensed restaurants and low for take-out restaurants, caterers and taverns.

[74] This estimate was made by adding together the value of "meals" and "service margins on alcoholic beverages" in the TSA "make" matrices to the cost of alcohol purchased from the province.

## SECTION 6: RECREATION AND AMUSEMENT INDUSTRIES

### 6.1 Overview of Findings

B.C. is well known for its natural beauty and variety of outdoor activities. This, coupled with a rising awareness of fitness, the growth in leisure time and changes in the tourism demand, has contributed to the development of B.C.'s recreation and amusement industries. Average family expenditures on recreation fees, sporting events and live stage performances have increased over 150% in the last 20 years[75].

The recreation and amusement services group in the TSA is composed of theatrical and live stage productions, professional sports, golf courses, ski facilities, boat rentals and marinas, recreation clubs and botanical gardens. Other recreation related sectors such as movie theatres, museums and retail sporting equipment sales are not included in the TSA but are discussed later in the paper in the section 8 discussing "other tourism-related industries".

In an economy in which fishing and forestry statistics dominate the news, it is easy to overlook the important economic impact from the recreation and amusement industries. This sector contributed approximately $213 million to the economy's GDP in 1988, roughly the same as the province's electronics industry. Approximately 17% of the $375 million recreation revenues came from food and beverages served. It paid a total of $140 million in wages and salaries and contributed $57 in value-added for every $100 of output. The three levels of government received $20 million in indirect commodity taxes. Four individual sectors, ski facilities, golf courses, theatrical productions and boat rentals and marinas each produced over $30 million in output and will be discussed separately. Figure 6A presents a summary of the TSA data for recreation and amusement service industries.

### 6.2 Ski Facilities

Skiing is a popular winter sport in Canada and an important boost to winter tourism revenues, accounting for more than 13% of all Canadian winter travel[76]. In 1987, 30% of B.C. families and almost 40% of those in Alberta owned skis. That translates into

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[75] 1978 and 1986 data from Statistics Canada, Family Expenditures in Canada, catalogue 62-555.

[76] Laurie McDougall, The Ski Industry, page 9.

Figure 6A
SUMMARY OF THE TSA RESULTS FOR RECREATION
(millions of dollars)

| RECREATION SECTORS: | OUTPUT | WAGES | GDP | GDP/O | T.R. |
|---|---|---|---|---|---|
| Skiing facilities | $72.4 | $29.3 | $41.4 | 0.57 | H |
| Golf courses | $59.2 | $28.1 | $37.1 | 0.63 | L-M |
| Entertainment production companies | $55.5 | $15.5 | $22.0 | 0.40 | M-L |
| Other theatrical services | $17.0 | $7.6 | $9.2 | 0.54 | M-L |
| Boat rentals and marinas | $32.8 | $8.6 | $21.4<br>$108.* | 0.65 | H |
| Botanical Gardens | $14.4 | $6.9 | $10.2 | 0.70 | H |
| Amusement parks | $20.4 | $5.5 | $10.0 | 0.49 | H |
| Pro. sports clubs | $12.4 | $6.2 | $6.3 | 0.51 | M |
| Pro. athletes | $3.0 | $0.9 | $1.2 | 0.40 | M |
| Other sports and recreation facilities | $22.1 | $10.9 | $15.6 | 0.71 | L |
| Bowling alleys and billiards | $27.9 | $9.6 | $16.0 | 0.57 | L |
| Coin operated amusements | $16.3 | $4.7 | $10.8 | 0.66 | L |
| Other amusements/rec. | $21.2 | $6.4 | $11.4 | 0.54 | L |
| RECREATION TOTAL | 374.6 | 140.2 | 212.7 | 0.57 | |

GDP/O = GDP to Output ratio

T.R. = tourist ratio = the % of total output attributed to tourism
H = High M = Medium L = Low

* The Marine Tourism Study estimate for marinas and coastal experience.

Source: Tourism Satellite Account Results, July 1 1991. (1988 data)

640,000 families in two markets that produce 85% of B.C. skiers[77]. The percentage ownership south of the border in Washington and Oregon states is similar. The Ministry of Tourism estimated that the 3.3 million skiers on B.C.'s slopes paid nearly $47 million in lift revenues in the 1987/88 season.[78] The mountain resorts earned $84 million in gross revenues, heliski and snowcat operations earned $18 million and cross country skiing earned $2 million.

According to the TSA, total revenues in B.C.'s 68 ski facilities exceeded $74 million in 1988. The ski industry's $41 million in GDP is the same size as the B.C. wine industry. Employment produced $29 million in wages and salaries for 2,640 FTE[79]. Overall for every $100 of output in the ski industry, $57 of value-added was produced.

Not surprisingly, 67% of the ski industry's revenue was derived directly from providing recreation services and another 20% was related to meals and beverages served. The ski operations contributed $2.5 million in indirect taxes to the three levels of government.

From the definitions of tourist and excursionist, nearly all of the value of the ski sector's operations can be attributed to tourism. However, this is only a portion of the total impact that skiing has on the local winter economy. Once attracted to the ski area, skiers spend a large proportion of their expenditures on food, accommodation, transportation, retail purchases and other items provided by local businesses.

In recent years the ski market has become increasingly competitive. As a result many downhill facilities have invested "substantial" resources in snow-making equipment, increasing capacity, and improving base lodge accommodation and other facilities[80]. Over $35 million was spent in 1988 and a record $39 million was spent in 1990[81] which produced another round of impacts on the local construction industry.

## 6.3 Golf Courses

It is obvious that the popularity of golf is growing in B.C. On Vancouver Island alone, six out of 47 golf courses were built or expanded in the last three years. Attractive to

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[77] The Ski Market Study, page 14.

[78] 1989/90 Ski Season: BC's Mountain Resorts.

[79] Ibid.

[80] Laurie McDougall, The Ski Industry, page 9.

[81] 1989/90 Ski Season: British Columbia's Mountain Resorts.

local residents and tourists alike, the considerable growth in the industry is related to the rising average age of the population and the marketing of golf vacations.

B.C.'s 161 golf courses earned $63 million in revenues in 1988. In addition to providing golf related services, their food and beverages operations accounted for an important part of total revenues. From output of $60 million, Golf courses produced $37 million in value-added, including $28 million in wages and salaries. The 1986 Census estimated that 2,700 people were employed in B.C.'s golf courses[82]. The sector's relatively high proportion of labour contributed to an GDP-to-output-ratio of .63. Golf courses paid almost $3 million in indirect taxes including the hidden tax in the cost of alcohol. The tourism component in golf courses is probably low to medium depending on the location of the course and the season.

## 6.4 Entertainment Production / Theatrical Services

Each family in B.C. spent $47 on theatrical and other live performances in 1986[83]. Recent years have seen a soaring popularity in many productions from large scale "extravaganzas" such as *Cats* or *Phantom of the Opera* to shoe-string Fringe Festival performances, but there are theatrical companies struggling to stay alive all across the province. The entertainment production and other theatrical services companies in this sector earned a total of $73 million in revenues in 1988. They produced $31 million in GDP, paid over $23 million in wages and salaries. The 1985 census estimated that 3,600 were employed in this sector in B.C.[84] Estimates, however, do not include the value of volunteer labour that is important in many of the regional theatres. Entertainment production costs are a high proportion of total output, and wages form only 26% of total revenues, compared to 36% in the other theatrical services category. Value-added accounts for only $40 of every $100 in output from entertainment production companies, compared to $54 for other theatrical services, it still contributes more to the economy for every dollar of output than the primary product industries. These entertainment categories paid $1.7 million in indirect taxes to the three levels of government. The tourism component of the theatres' audiences would probably range from medium to low, depending on the size and location of theatre and the season.

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[82] Touriscope 1988, page 164.

[83] Family Expenditures in Canada, Statistics Canada, catalogue 62-555.

[84] Touriscope 1988, page 164.

## 6.5 Boat Rentals and Marinas

Boat rentals and marinas form the fourth largest recreation and amusement category in the TSA. Water sports are popular summer activities in the interior of the province and year round on the west coast. Over 132 thousand families in B.C. owned outboard motor boats and another 31 thousand who owned sailboats for an average boat ownership ratio of 22%[85]. In addition, *Marine Tourism in B.C.*[86] identified over 500 operators which offered day charters, boat rentals of all types and marine tours. Altogether, the TSA estimated that boat rentals and B.C.'s 165 marinas earned almost $34 million in revenues in 1988. Wages and salaries made up 40% of the $21 million in GDP produced. Every $100 of output generated $65 in GDP well above the average for the recreation industry. In addition, these industries paid $1.8 million in indirect taxes.

*Marine Tourism in B.C.* arrived at 1989 estimates that were five times higher than the TSA figures[87]. It estimated that day charters and "coastal experience"[88] produced $27 million in GDP in addition to the $81 million from marinas. Altogether, they paid $35 million in wages and salaries, more than 30% of their value-added, created 2600 person years of employment and had investments totalling $290 million.

The differences between the two sets of figures may be due, in part, to methodology. First, the TSA data is based on a relatively narrow Statistics Canada definition. Second, the revenues from charters or other marine activities that are associated with lodges and hotels would be included in the revenues of the accommodation industry. Third, many of the small businesses are part-time or part-year operations and, therefore, may be underestimated in the Statistics Canada data. Reasonably, the TSA estimate can be considered as the minimum value and the *Marine Tourism in B.C.* can be near the maximum for west coast based water activities. There is a high tourism component in this category.

## 6.6 Other Recreation categories in the TSA

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[85] 1987 data from Household Facilities and Equipment, Statistics Canada, catalogue 64-202.

[86] Marine Tourism in British Columbia: An Opportunity Analysis, page 2-3.

[87] Ibid, page 2-10.

[88] Coastal experience included power cruising, sail cruising, marine wildlife viewing, scuba diving and kayaking.

The other 7 categories under the recreation and amusement title produced $82 million in GDP from revenues of $150 million in 1988. Professional sports clubs and professional athletes including the 86ers, the B.C. Lions and the Canucks earned more than $15 million in revenues and produced $7.5 million in value-added in 1988. Their GDP-to-output-ratios were lower than the recreational average, due in part to the operating deficit of the professional sports clubs. Together, these three sectors paid $3 million in indirect taxes. These sports clubs have a medium tourism component.

Amusement parks, which make up an important part of B.C.'s popular tourist attractions, earned over $20 million in 1988 and added $10 million to GDP. For every $1 in admission prices, 49 cents was produced in value-added, the second lowest for the TSA account. Amusement parks have a high tourism component.

Victoria and Vancouver draw a large number of tourists and excursionists to see their famous botanical gardens. On average, 20% to 25% of B.C.'s tourists visit gardens and parks[39] but in Victoria the proportion rises to almost 40% creating a high tourism ratio for this category. Its famous garden is an important feature in marketing south Vancouver Island to tourists and it creates spin-offs throughout the Vancouver Island tourism industry. B.C.'s botanical gardens earned a total of $14 million in 1988. They are labour intensive operations with wages and salaries accounting for 70% of the $10 million produced in value-added. The GDP-to-output-ratio of .70 is one of the highest in the TSA account.

## 6.7 Estimation of Tourist Expenditures

Recreation and amusement businesses are popular with both local residents and tourists alike, and in many cases the line between the two is very fine. The Task Force on Tourism Data produced a general estimate that 47% of recreation and amusement expenditures were made by tourists. However, because the tourism percentage depends on the type of activity, season, location and so on, it is impossible to arrive at one general number. For example, skiing has a high tourism ratio compared to golf facilities which are located closer to home. Each of the recreation and amusement sectors has been classified in terms of its tourism component from high to low in Figure 6A. Regardless, any investment this sector benefits both residents and tourists alike.

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[39] *Visitor '89* and the *BC Resident* Study.

## SECTION 7: TRANSPORTATION RELATED INDUSTRIES

### 7.1 Overview of Findings

In the transportation industry, tour companies and travel agencies are part of the core tourism industries; many other transportation sectors provide support services that are related to tourism. The TSA has attempted to measure the economic contribution of travel agents, water and urban transportation, charter busses and automobile rentals. Figure 7A presents a summary of the TSA results for some transportation industries that are related to tourism.

The airline sector, an essential part of modern day travel, is notably absent from the TSA estimates. Canadians spent $1.9 billion on inter-city air travel or $211 per family in 1986[90]. Unfortunately, it is difficult to estimate the regional impact of the airline industry. When travel begins and ends in different provinces or counties, and could be paid for in either, it is difficult to determine the value that should be attributed to a particular region. This is a common problem in tourism statistics, and as a result, the cost of airline travel is frequently omitted from calculations of the economic impacts from tourism.

### 7.2 Tour Wholesalers and Ticket / Travel Agents

Over 40% of tourists from outside the province relied upon travel agents for information when planning their trip[91]. Although this sector is an important part of the travel industry, little information was collected before 1988 because the sector "did not make a strong case for specialized statistical output reflecting the volume and trends in its activities"[92] However, as of 1988, travel agencies became one of the few parts of the tourism industry that is surveyed annually by Statistics Canada.

Tour wholesale and operators, and ticket and travel agents earned over $274 million in revenues in 1988, all of which is exclusively related to tourist activity. A 1987 Statistics Canada estimate for total Travel Services in B.C. was $353 million[93]. Not surprisingly,

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[90] Family Expenditures in Canada, Statistics Canada, catalogue 62-555.

[91] *Visitor '89.*

[92] Stephen Smith, Other Tourism Services: Examples of the Lesser-Documented Industries, page 129.

[93] Business Services, Statistics Canada, catalogue 63-232.

Figure 7A
SUMMARY OF THE TSA RESULTS FOR TRANSPORTATION
(millions of dollars)

| TRANSPORTATION: | OUTPUT | WAGES | GDP | GDP/O | T.R. |
|---|---|---|---|---|---|
| Urban and water transportation | 297.7 | 225.2 | 428.9 | * | Urb=L Wat=H |
| Charter busses | 25.8 | 8.6 | 13.2 | 0.51 | H |
| Tour wholesalers and operators | 31.4 | 14.7 | 19.2 | 0.61 | H |
| Ticket and travel agencies | 243.0 | 123.8 | 156.6 | 0.64 | H |
| Auto, Truck rental and leasing | 215.8 | 27.5 | 157.8 | 0.73 | L |
| Parking lots and garages | 76.7 | 17.5 | 27.1 | 0.35 | L |
| TRANSPORTATION TOTAL | 890.4 | 417.3 | 802.8 | | |

GDP/O = GDP to Output ratio

T.R. = tourist ratio = the % of total output attributed to tourism
H = High M = Medium L = Low

* This category receives a large subsidy from the government which distorts the calculation of the GDP to output ratio.

Source: Tourism Satellite Account results, July 1 1991. (1988 data)

telephone, telegraph, and advertising account for 32% of the sector's nearly $100 million in inputs. Labour, including over 4,000 travel agents and guides[94], earned $139 million in wages and salaries. In total this sector produced $176 million to the province's GDP and an GDP-to-output-ratios of .61 for tour wholesalers and .64 for travel agents.

## 7.3 Urban and Water Transportation

Urban and water transportation account for the largest single category in the TSA's transportation sector. The B.C. ferry system dominates water transportation in the province. Although the TSA economists acquired detailed financial statements from the B.C. Ferry Corporation, The Clipper, and the Stena Lines, requirements of confidentiality required that the ferry statistics be combined with urban transportation which is dominated by B.C. Transit. Altogether, they make a massive and diverse sector. Where as nearly all the ferry revenue can be attributed to tourism, tourists comprise a small percentage of urban transit's passengers, making it nearly impossible to arrive at a final proportion for tourism.

The water and urban transportation category earned $298 million in revenues in 1988 and received $283 in government subsidies. They contributed $429 million to the province's GDP including $225 million in wages and salaries and received .

## 7.4 Charter Bus Operations

Of the two TSA categories under miscellaneous transportation, only "other bus" or charter busses relate to tourism. School busses may transport students on day trips, but this is a fraction of their daily use. There are 16 charter bus companies in B.C.[95] They earned $26 million in revenues in 1988 and their transportation produced $13 million in GDP including $9 million in wages and salaries. The GDP-to-output-ratio was .51. Indirect taxes which include property and gasoline taxes and licence fees totalled $.6 million. A high proportion of charter bus transportation can be attributed to tourism.

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[94] The 1986 Census, Statistics Canada, catalogue 93-116.

[95] British Columbia Accommodations 1991.

## 7.5 Auto, Truck Rental and Leasing

Tourists make up the majority of customers of auto rental businesses. In B.C. in 1990, there were approximately 280 auto rental outlets[96]. An estimated 21% of non-resident tourists in B.C. travelled by rented car in 1989[97]. Unfortunately, available data reports auto rentals, truck rentals and auto leasing together in a single category. Therefore, only part of the $216 million in revenues can be attributed to tourism. Transport Canada estimated vehicle rentals in the western provinces at $21 million in 1984. This would be equivalent to $23 million in 1988 dollars using the implicit price deflator for transportation services. In the TSA, this broad category produced a high proportion of value-added, 73% of every $1 of output produced. Altogether, it added $158 million in GDP to the provincial economy and paid $28 million in wages to labour and $6 million in indirect taxes.

## 7.6 Parking Lots and Garages

Parking lots and garages earned $77 million in revenues in 1988 and paid almost $18 million in wages and salaries out of $27 million in GDP. Although only a fraction of this is attributable to tourism, even tourists must park there vehicles somewhere. Parking lots generally employ a single attendant, or replace them with ticket vending machine; the GDP-to-output-ratio is extremely low, .35 just slightly above the rate for the forestry industry.

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[96] B.C. Product Guide 1991, Automobile and Truck Rentals.

[97] Visitor '89.

## SECTION 8: GOVERNMENT TAX REVENUES FROM THE TOURISM INDUSTRY

### 8.1 Indirect Taxes

The tourism industries' contribution to government tax revenues is significant. In 1988, the TSA tourism industries paid more than $560 million in indirect taxes which are the taxes that are included in the final sums paid by the consumers[98]. The provincial government collected the largest portion, $360 million or 65% of the tourism industries' indirect taxes. The other $200 million was shared almost equally by the federal and local governments. Figures 8A, 8B and 8C present the indirect taxes by level of government, type of tax and sector, respectively.

In terms of types of indirect taxes, a total of 65% or $362 million related to the sale of alcoholic beverages. The provincial government collected $103 million of this total in the "alcohol tax" on alcoholic beverages served in licensed facilities. However, the larger portion, $259 million was collected in taxes that are hidden in the purchase price of alcohol. Out of every $100 that a hotel or restaurant spends on the purchase of alcohol, approximately $60 is made up of taxes in the form of import duties, excise taxes, federal sales taxes[99] and the B.C. Liquor Distribution Branch's liquor margin. The remaining $40 is the cost of production and transportation. It is valid to include these hidden taxes in the calculation of the total tax burden since these taxes fall almost entirely on the hospitality industry. In recent years, the tobacco industry has made it clear that the excise taxes on tobacco, sometimes referred to as "sin" taxes, have had significant effects on the tobacco market while contributing a large amount to the government revenues. Alcohol-related taxes have a similar importance in the hospitality industries: in 1988, the alcohol-related taxes accounted for 80% of the indirect taxes paid by the food and beverage sector and 57% of those paid by accommodation.

Indirect taxes can also be examined by sector as shown in Figures 8D and 8E. Almost 50% of the tourism industries' 1988 indirect taxes were paid in the accommodation sector. It had the highest "tax burden": its total indirect tax payment of over $276 million, including $158 million in alcohol related taxes and $44 million in hotel taxes, represented 16% of revenues in the accommodation sector. The food and beverage

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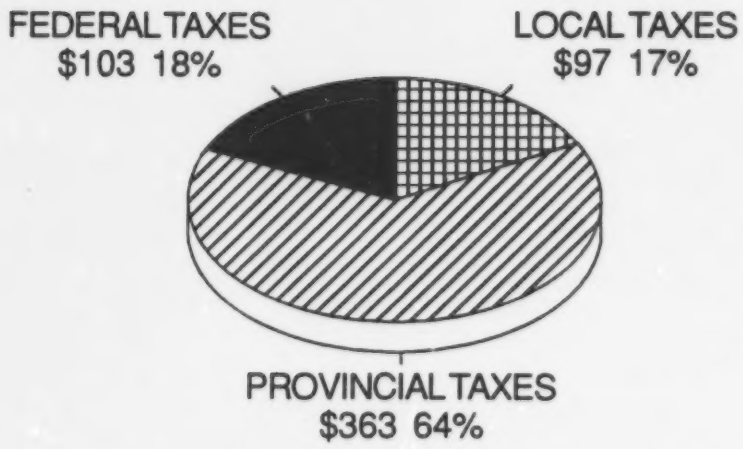
[98] Indirect commodity taxes include sales taxes, excise taxes, property taxes, license fees, import duties, hotel room taxes, movie taxes, alcohol taxes and other commodity taxes that are incorporated in the final expenditure by consumers.

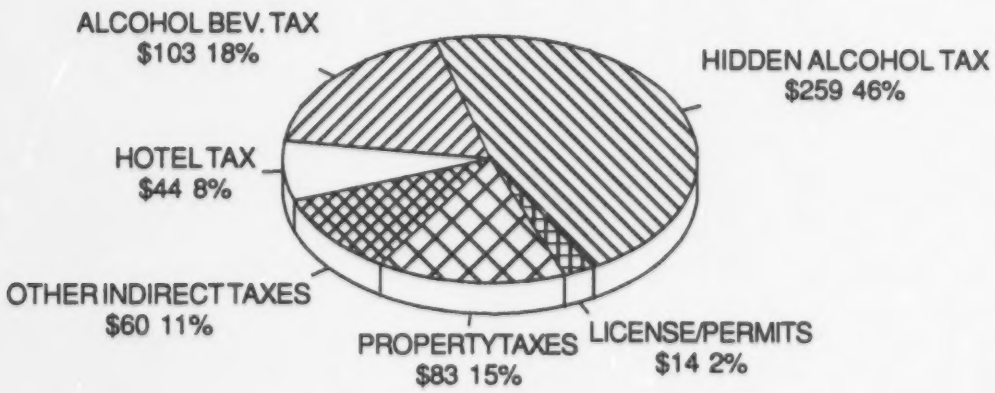
[99] The data in the TSA is for 1988, before the introduction of GST. After January 1, 1991 the FST was replaced by a 7% goods and services tax which is added on at the point of purchase.

## Figure 8A
## INDIRECT TAXES PAID
## (millions of dollars)



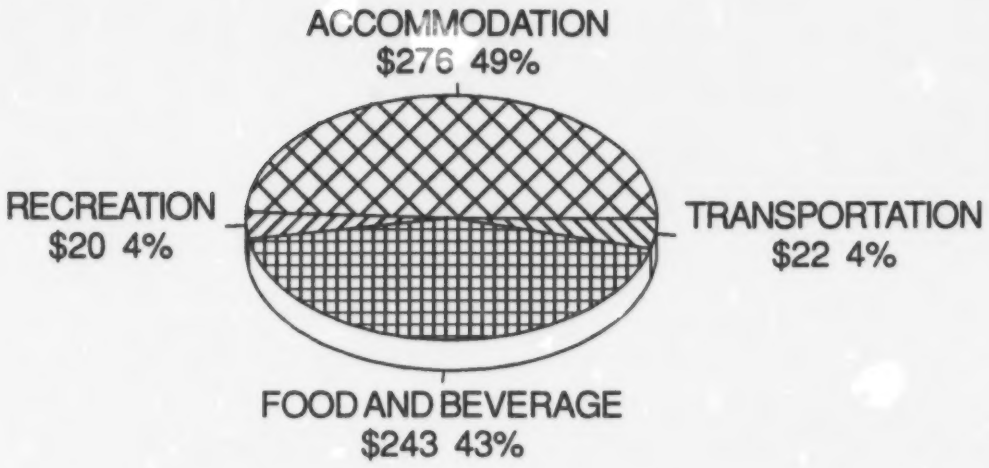

totals for TSA tier 1 and 2 Tourism Industries

## Figure 8B
## INDIRECT TAXES BY TYPE
## (millions of dollars)



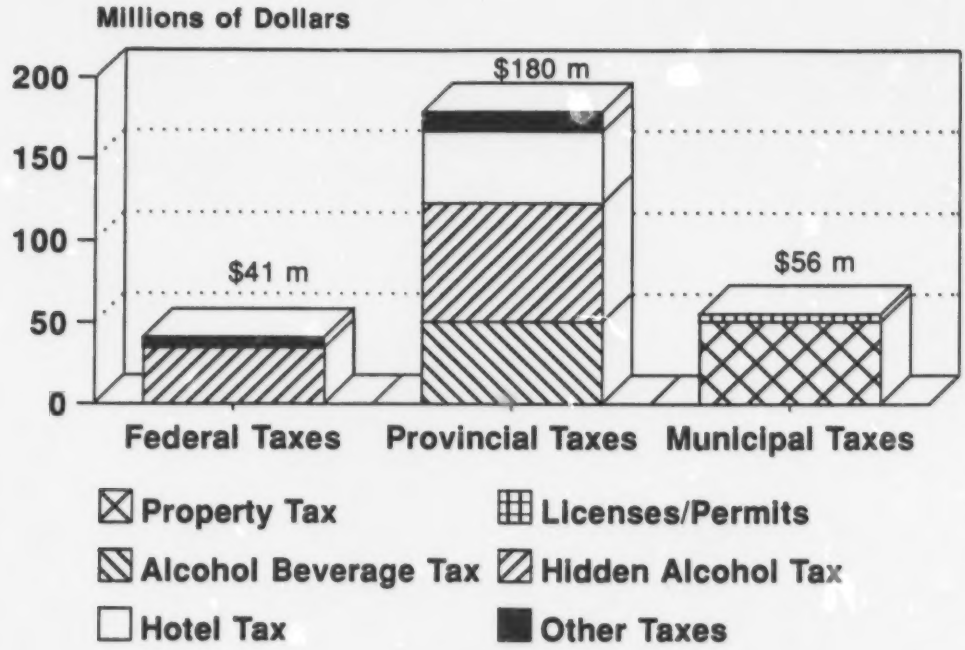

totals for tier 1 and 2 Tourism Industries

# Figure 8C
# INDIRECT TAXES BY SECTOR
# (millions of dollars)

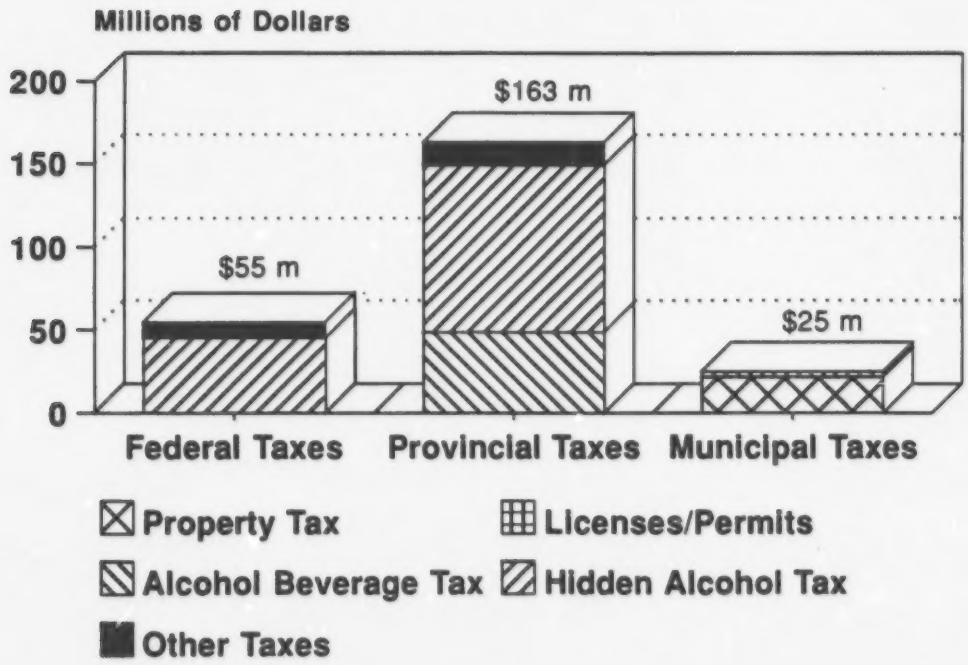



totals for TSA tier 1 and 2 Tourism Industries

# Figure 8D
# Indirect Taxes Paid
# Accommodation Industry




# Figure 8E
# Indirect Taxes Paid
# Food and Beverage Industry



industry had the second largest indirect tax bill, paying over $243 million. Not surprisingly, alcohol related taxes accounted for $194 million of this total. Overall, the food and beverage industry paid 9% of their total revenues in indirect taxes in 1988.

In January of 1991, the federal sales tax was replaced by the GST, the goods and services tax. Although the cost of some products was reduced when the FST was removed, the overall effect of instituting the GST was an increase in the total taxes paid in the service industries. This is especially true in the accommodation and food & beverage industries because the 7% GST is an additional tax on meals, beverages, rooms and other services. If it had been in place in 1988, the GST would have raised indirect taxes on licensed restaurants by $110 million[100] or almost 130 percent! Preliminary estimates for 1991 show that with the GST, indirect taxes in large hotels will be up to 67% higher than in 1988[101]. For comparison, if their room revenues in 1991 rise at the rate of previous years (rather doubtful in a recession year), then their 1991 room revenues would be 59% higher than in 1988. From this, it is reasonable to conclude that increase in indirect taxes from the GST will be more than the growth in revenues, resulting in a higher tax burden for the large hotels.

Expenditures by tourists and excursionists paid a significant proportion of the indirect taxes in the TSA industries. A rough calculation is probably around $200 million, although the problems of estimating tourism ratios reduces the accuracy of this estimate. However, when indirect taxes from tourist expenditures in the non-TSA industries are added including the provincial sales tax on retail sales and recreational vehicles, gasoline taxes, airport taxes, FST and other taxes, the total of tourists' tax payments would be considerably higher.

## 8.2 Direct Taxes and Payroll Taxes

Personal and corporate income taxes are direct taxes. Payroll taxes are the portions of the UIC and CPP premiums that are paid by the employers. Without detailed income tax returns, it is not possible to calculate corporation profits and taxes, but some general estimates can be made about personal income taxes and payroll taxes.

In order to estimate personal income taxes paid, average earnings and average tax rates need to be estimated. Because of the diversity in occupations and earnings in the recreation and transportation industries in the TSA, only the accommodation and food and

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[100] Pacific Analytics, The Tourism Satellite Account: Methodology and Results.

[101] Speaking notes: The Tourism Satellite Accounts: Presentation of Final Results.

beverage industries will be considered in this discussion of personal income taxes. Total wages and salaries are shown in the TSA data, but accurate measurements of average earnings per FTE are not available except for the large hotels. The Statistics Canada average earnings estimate of $16,000 for full-time, full-year workers in the accommodation and food and beverage industries can be used, although earlier discussions in this paper have pointed out that this figure probably underestimates earnings. Based on these low average earnings and simplified assumptions concerning other sources of income and tax liability, the federal and provincial tax rates were estimated at 8% and 4%, respectively. Using these rates, the federal and provincial governments would have received, in 1988, at least $115 million and $57 million, respectively, in personal income taxes from accommodation and food & beverage industries combined. If higher average earnings are estimated, the average tax rates might be 10% for federal taxes and 5% for provincial taxes and the governments would have received an estimated $216 million in personal taxes from these two important tourism industries. These estimates are presented in Figure 8F.

Another form of taxation is the payroll taxes such as UIC and CPP. These are related to the level of earnings of the workers, up to a maximum contribution, and the premiums are divided between the employer and the employee. The payroll taxes account from more than half of the $150 million that the TSA industries paid in supplementary labour income[102]. The large hotel sector, for example, paid $8 million in UIC and CPP out of over $13 million in supplementary labour income payments for a work force earning a total of $121 million[103].

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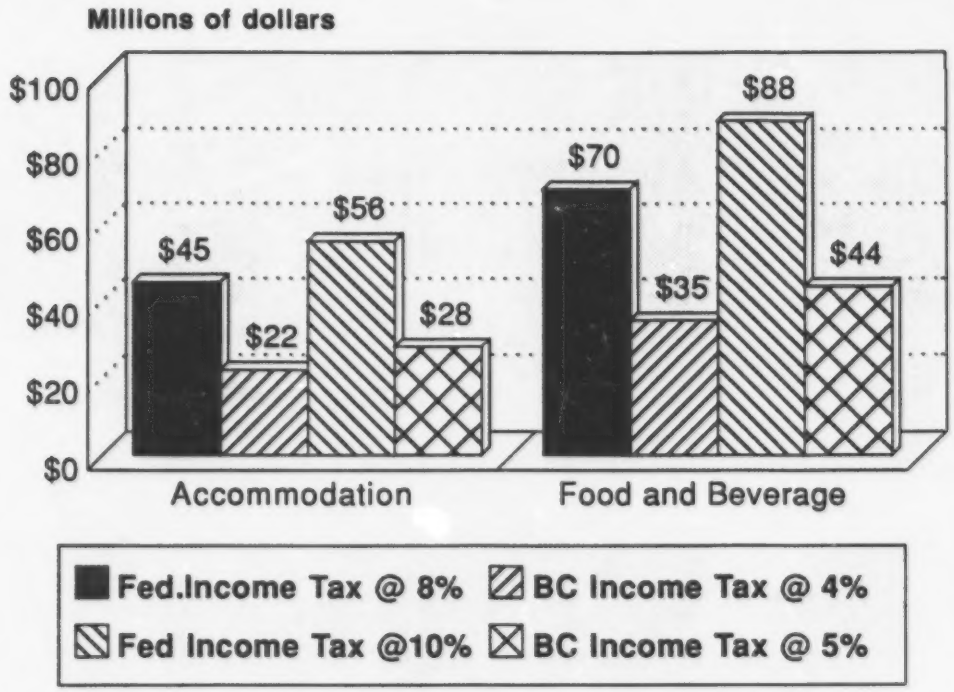
[102] Pension plan, medical and dental plan contributions and other benefits are included in supplementary labour income.

[103] Speaking Notes: The Tourism Satellite Accounts, Presentation of Final Results.

# Figure 8F
# Estimated Personal Income Tax



## SECTION 9: NON-TSA INDUSTRIES RELATED TO TOURISM

### 9.1 Overview of Non-TSA Tourism-Related Industries

The TSA has estimated the economic impact of 39 individual categories of tourism-related industries in accommodation, food and beverage, recreation and transportation. However, due to difficulties in obtaining further data or estimating the proportion of output that is purchased by tourists, the TSA did not include several other important tourist-related industries. This section attempts to describe some of these industries using data from a variety of sources. The analysis is by no means extensive, but is intended as an overview of the size of these non-TSA industries and the difficulties encountered in their measurement. Figure 9A presents a chart that summarizes these findings.

### 9.2 Retail Sales

The retail trade category makes up more than 10% of the province's service sector and produced $4.5 billion in GDP in 1988[104] from total retail sales of over $18.6 billion[105]. Many tourism studies exclude the retail sector because of the difficulty of estimating the portions of their services which can be directly related to tourism[106]. Recent tourist studies in B.C. estimated that B.C. residents spent about $690 million and tourists from outside the province spent $340 million on shopping and souvenirs while travelling in the province[107].

Statistics Canada identifies 23 categories of retail stores specializing in groceries to jewellery. Unfortunately, currently it does not include designations for "souvenir" or photography stores, two categories that would be useful in the study of tourism expenditures. A recent conference on travel and tourism statistics included a proposal for a standard classification scheme of tourism activities that included 18 categories of retail stores. Of these 6 were "tourism" (souvenirs, retail sales luggage, travel wear and accessories, scuba gear, skiing and hiking equipment).

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[104] BC Economic Accounts 1961-1989.

[105] Retail Trade, Statistics Canada, catalogue 63-005.

[106] Michael Cote, The Tourism Labour Force.

[107] *Visitor '89* and *Resident Travel in B.C.*

Figure 9A:
Summary of Non-TSA Tourism-Related Industries

| Tourism-Related Industry | Estimated Value | Tourism Ratio |
|---|---|---|
| Total Retail Sales | $18.6 Billion | Low |
| (Visitor '89 data 1989) | $340 Million ++ | High |
| (BC Resident study 1989) | $600 Million * | High * |
| Groceries/Beverage sales | | Medium |
| (Visitor '89 data 1989) | $145 Million | |
| (BC Resident study 1989) | $155 Million * | |
| Sporting Goods Sales | $93 - $340 Million | |
| Gasoline Sales | $1.4 Billion | Low |
| (seasonal increase over Feb) | $45 - 150 Million + | High |
| Duty Free Shops | no net gain | 100% |
| Festivals and Special Events | no data | Med - High |
| Vending Machine Revenues '89 | $34 Million | Low |
| Movie Theatre Revenues | $53 Million | Low |
| Advertising (1987) | $163 Million + | Medium ? |
| (advertising in TSA tables) | $140 Million | 50% in Canada |
| Recreational Vehicle Sales 86 | $ 72 Million + | 100% |
| Taxicab Operations | no data | 30% ? |
| Tourism Related Construction: | | |
| 1986 data | | |
| Hotels and Accommodation | $121 Million | 100% |
| Theatres, Arenas, Amusement Parks, etc. | $147 Million | Medium |
| Tennis Courts, Recreational facilities | $ 57 Million | Low |
| Government: | | |
| Tourism related Budget | $19 Million | 100% |
| Construction: 1986 data | | |
| Highways, Roads | $1.1 Billion | Medium |
| Terminals: Air, Bus | $21 Million | 100% |

All data 1988 unless specified.

* Part of this spending by the B.C. resident was "trade diversion" which means that the expenditure would have taken place if the resident had not travelled.

For Sources of data, please refer to individual discussions in section 9 of this paper.

The discussion of retail expenditures also raises the topic of "trade creation" or "trade diversion"[108]. When a visitor from outside the province makes a purchase in B.C., the money spent "creates" an additional "injection" into the B.C. economy; it is equivalent to an export which brings extra income into the province. Over 3 million non-resident parties spent a $133.50 per party per day for a total expenditure of total of $2.4 billion in 1989[109]. This expenditure "created" new income, wages and taxes. The World Tourism Organization terms this **specific tourism expenditure**. However, not all of the $2.6 billion[110] spent by B.C. resident tourists was "trade creation"; rather than adding to total spending, some of those expenditures were "diverted" from one region to another in the province. For example, most of the $218 million that they spent on groceries was "trade diversion". The World Tourism Organization calls this **ordinary tourism expenditure**. If the B.C. residents had remained at home, they would have bought groceries in their local area; when they went on vacation, they "diverted" these expenditures to a different region. What is a loss for the home region is a gain in the destination area. Only additional expenditures, over the normal expenditures at home, is "trade creation" and an injection into the B.C. economy.

Recreation and sporting goods sales is the only tourism-related category of retail sales that have sufficient data to analyze. In 1988, B.C.'s sporting goods and accessories stores had sales of almost $340 million[111]. Another source of data, estimates of average family expenditures, yields very rough calculations of the total expenditures on various types of recreation equipment. In 1986, B.C. families spent $30 million on bicycles, $13 million on camping and picnic equipment, $15 million on fishing equipment, $23 million on skis and $12 million on golf equipment[112]. A medium percentage of these expenditures could be attributed to tourism.

In general, the available Statistics Canada categories of retail sales yield little insight into tourism expenditure, except in sporting goods and accessories stores. However, using an unorthodox approach, an examination of monthly sales does suggest a value of tourism expenditure, although hardly a reliable one. The seasonal pattern in retail sales is dominated by two peaks, the largest in the Christmas spending period, and the second in

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[108] The Conference on Travel and Tourism Statistics used different terms. "Created" expenditures are termed "specific tourism expenditure" and "diverted" expenditures are termed "ordinary expenditures".

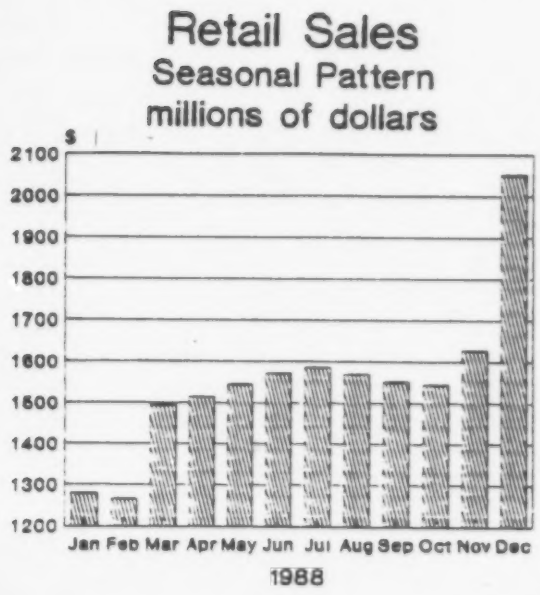
[109] *Visitor '89.*

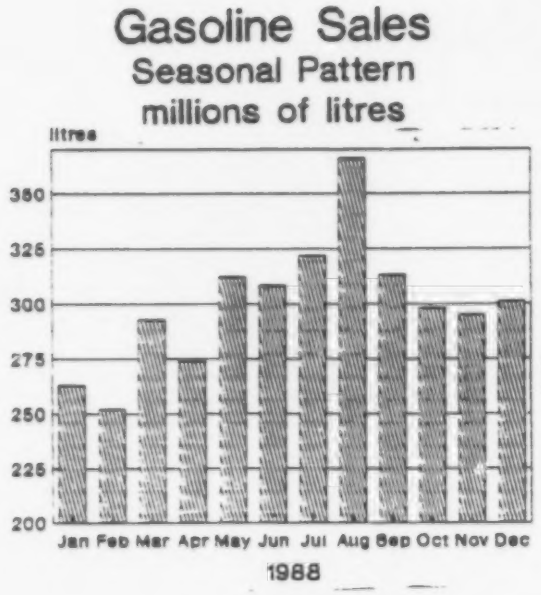
[110] Resident Travel in British Columbia, page 9.

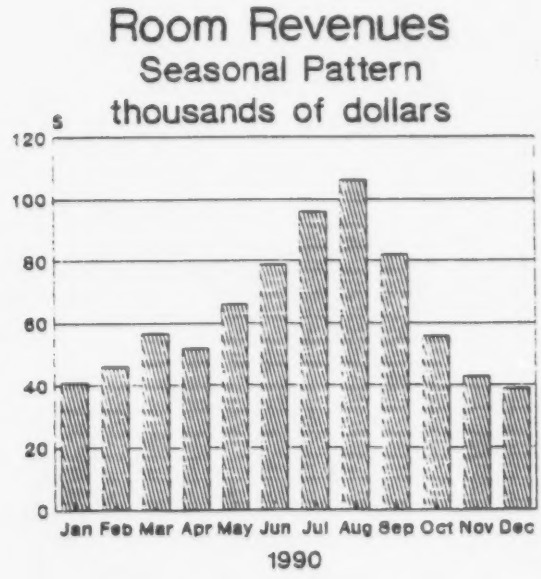
[111] Retail Trade, Statistics Canada, catalogue 63-005.

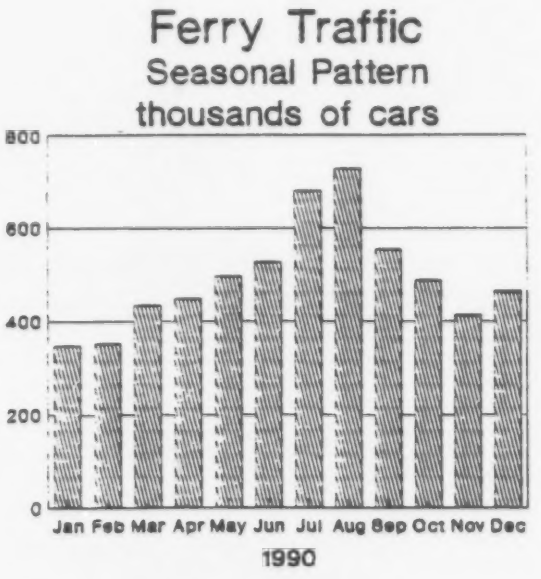
[112] These are rough estimates, average family expenditures x number of families, based on data in Family Expenditure in Canada, Statistics Canada, catalogue 62-555.

Figure 9B:
The Seasonal Patterns of Retail Sales, Gasoline Sales, Accommodation Room Revenues and BC Ferry Traffic




Sources:
Retail Trade, Statistics Canada, catalogue 63-005.
Road Motor Vehicle Fuel Sales, Statistics Canada, catalogue 53-218.
BC Tourism Room Revenues, BC Stats.
Data from the BC Ferry Corporation.

the peak travel period of July and August. In these summer months, retail sales rise by approximately 30 million each month, with the effect felt across the categories of stores from recreation equipment to groceries. Reasonably, this increase could be attributed to tourist related activities. A brief look at the pattern of monthly retail sales, ferry traffic, service station revenues and hotel revenues presented in figure 9B, shows a definite correlation between the four series of data that is due, in large part, to seasonal tourism travel. However, unless credit card slips can be used to identify the origin of the consumer and the type of purchase, the only realistic source of data is a detailed visitor survey which ask specific questions about types of purchases made during trips.

## 9.3 Gasoline Sales

There were over 5,300 service station attendants employed in B.C. in 1986[113]. Total revenues for 1988 were $1.4 billion[114]. The National Task Force on Tourism Data suggested that 25% of gasoline sales are related to tourism, but that rough estimate seems too high. The data in figure 9B show the monthly pattern of gasoline sales follows the seasonal pattern of tourism travel quite closely. July and August add $10 million each month or approximately $45 million in "extra" revenues in the tourism season from April to October. Using 1988 data, August sales are typically 45% higher than January. This could be given as an estimate, albeit a very rough one, of the injection or "created trade" as tourists travel by car in the summer and spend more on gasoline than if they had stayed as home.

## 9.4 Duty-Free Shops

Canada's 40 duty-free airport shops produced an estimated $100 million in revenues in 1990[115]. There is no estimate of the expenditures in the Vancouver airport duty free shop nor the duty free shops at the border with the USA. However, since B.C. has a deficit in its international travel account, the revenues earned in the B.C. shops are probably less than the expenditures by B.C. residents in foreign duty free shops resulting in no net gain for the economy.

## 9.5 Festivals and Special Events

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[113] 1986 Census data, Statistics Canada, catalogue 93-116.

[114] Retail Trade, Statistics Canada, catalogue 63-005.

[115] Stephen Smith, Other Tourism Services: Examples of Lesser-Documented Industries.

Festivals and Special Events have become increasingly popular both as community events and tourist attractions. The National Task Force on Tourism Data defined a festival or special event as "a celebration of some theme to which the public is invited for a limited time only, annually or less frequently"[116]. The B.C. government's tourist publications featured 200 special events from the Swiftsure Yacht race in Victoria to Billy Barker Days in the Cariboo. These festivals draw local residents and tourists alike and generate both an economic impact at the time and a recognition factor that frequently lasts long after the event. Many of these events are staged by non-profit organizations or local groups making it difficult to obtain information on the economic impact of the event. However, a study of Saskatchewan's 200 festivals and events estimated that they generated $168 million in tourist expenditures in 1985[117].

## 9.6 Vending Machines

There were over 20,000 vending machines in B.C. in 1989 dispensing the expected array of hot and cold drinks, snacks, fresh foods and cigarettes. They earned $34 million in revenues[118]; probably a low proportion of those quarters were inserted by tourists.

## 9.7 Movie Theatres

More than 13 million tickets were sold in over 105 movie theatres and drive-in theatres in B.C. in 1988. Excluding amusement taxes, they earned more than $53 million in revenues[119]. The National Task Force suggested that tourists account for 47% of movie revenues; however, given that the definitions of a tourist and excursionist, that proportion seems too high.

## 9.8 Advertising Services and Printing

All of the businesses in the tourism industry rely on a wide variety of advertising and promotional materials to reach their target markets. According to the TSA, the accommodation, food and beverage part of the tourism sector spent almost $100 million

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[116] Stephen Smith, Other Tourism Services: Examples of the Lesser-Documented Industries, page 138.

[117] Ibid.

[118] Vending Machine Operators, Statistics Canada, catalogue 63-213.

[119] Film and Video in Canada, Statistics Canada, catalogue 87-204.

on promotion in 1988 and other TSA categories spent an additional $40 million. Although the TSA has already recognized promotion as an input and a cost in the "use" matrix, the GDP created in the promotion industry itself should be measured. Since most tourism related businesses advertise both within and outside the province, only the proportion spent in B.C. can contribute to the provincial economy. The TSA estimates do not include the large amount spent by the provincial and local governments and the tourism-related associations. Statistics Canada estimated that advertising services in B.C. earned $163 million in revenues in 1987[120].

## 9.9 Purchases of Recreational Vehicles

The sales of recreational vehicles (motorcycles, snowmobiles and camp vehicles) were estimated at $72 million in 1986[121]. All of these expenditures can be attributed to tourism. Although B.C. does not manufacture any motor vehicles, there are many small companies in the province which specialize in vehicle conversion and RV accessories.

## 9.10 Taxis

B.C.'s taxi cab operations employed nearly 4,000 people in 1986[122]. Unfortunately, no estimates were available for the revenues from taxis. The National Task Force on Tourism estimated that 30% of taxicab operations were related to tourism.

## 9.11 Tourism related Construction

Although tourism is mainly a retail industry, it does involve considerable investment and construction. Statistics Canada[123] estimated that the construction in hotels, clubs, restaurants and tourist cabins in the province totalled $121 million in 1986. Theatres, arenas, amusement parks and recreational buildings accounted for $147 million and swimming pools, tennis courts and outdoor recreational facilities added another $57 million.

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[120] Business Services, Statistics Canada, catalogue 63-232.

[121] Family Expenditures in Canada, Statistics Canada, catalogue 62-555.

[122] Touriscope, page 164.

[123] Construction in Canada, Statistics Canada, catalogue 64-201.

## 9.12 Government Expenditures on Tourism

The tourism portion of the budget of the Ministry of Tourism and Provincial Secretary was approximately $19 million in 1988/89. It played an important role in assisting the travel industry, and marketing B.C. as a travel destination. Annually, it distributes 2.5 million maps, travel guides, posters and other literature and maintains a system of travel centres across the province. The government promotion campaigns are effective at attracting tourists and generating tourist expenditure: the *Visitor '89* study found that visitors who saw the B.C. advertisements spent $41 extra per person during their B.C. trip, and visitors who requested government travel information spent $30 more per person.

The provincial government spent $1.1 billion on highway, road and street construction in 1986, and another $21 million on passenger terminals for bus, boat or air transportation systems[124]. Although transportation links are seldom built solely for tourism purposes, "the tourism market potential plays a major role in upgrading existing facilities and building new ones"[125].

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[124] Construction in Canada, Statistics Canada, catalogue 64-201. This data also includes the Northwest Territories and the Yukon.

[125] Peter Murphy, Tourism: a Community Approach, page 14.

## SECTION 10: DIRECT, INDIRECT AND INDUCED ECONOMIC EFFECTS FROM TOURISM IN B.C.

### 10.1 Summary of Direct Economic Impacts

In 1988, businesses in B.C.'s accommodation, food and beverage, recreation and transportation sectors earned a total of $5.5 billion[126]. They produced a direct economic impact of $3.4 billion in value-added, equal to the GDP of the fishing, forestry and mining industries combined. Over 60% of this, a total of $2 billion, was paid in wages and salaries. The tourism industry is relatively labour intensive; wages accounted for $37 of every $100 of output. Overall, the tourism industries add $1.33 in value-added to each $1 of inputs, compared to a more capital intensive industry such as forestry which adds less than 45 cents.

These tourism industries' contribution to the governments' coffers is significant. In 1988, they paid a total of $287 million in indirect taxes to the three level of governments (in addition to sales, labour and business income taxes) and received subsidies of $840 thousand.

### 10.2 Indirect and Induced Effects

Indirect economic effects from tourism expenditures are created as the businesses in the tourism industry purchase inputs from other businesses in the region, and people who work in the tourism industries spend their incomes on local goods and services. According to the TSA estimates, the industries that produced tourist commodities and services purchased inputs worth $2.1 billion in 1988 which had a multiplied "indirect impact" on suppliers, wholesalers, the construction industry and other sectors that supply goods and services. The TSA industries also paid over $2 billion in wages and salaries that had an additional "induced impact".

The size of the indirect and induced impacts are directly related to the proportion that is spent on B.C. produced goods and services at each subsequent round of spending. In order to determine the magnitude of the multiplier effect, we need to know where each business purchases its inputs. On average, imports from outside B.C. represent 33 cents

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[126] This total was earned in the following industries (by SIC codes): accommodation services industries 911-914, food and beverage service industries 921-922,

out of every dollar of GDP[127]. Basing assumptions on the data compiled in the TSA, the tourism industry generally has a higher level of regional content than the provincial average. For example, agriculture, processed foods and fish landings, all of which have high regional content, make up 45% of the inputs in the food and accommodation sectors. A hotel or restaurant that chooses to feature "made in B.C. products" as part of its appeal to tourists, would have a larger indirect impact in the economy. On the other hand, approximately 50% of travel, advertising and promotion expenditures are spent outside the province. However, even if a tourism business purchases all of its inputs in B.C., a portion would leak out in subsequent rounds as inputs are imported by producers and wholesalers or go to taxes and savings. Therefore, the size of this multiplied indirect and induced effect is entirely dependent on the structure of the B.C. economy.

## 10.3 Economic Impact Multipliers

Economic impact multipliers attempt to measure the additional income, wages or jobs that will be created from an initial increase in spending in the economy. In tourism impact analyses, the multiplier represents the number of times that each tourist dollar goes around the local economy before disappearing entirely through various leakages[128]. Multipliers attempt to describe the total impacts from direct, indirect and induced effects in the economy. Although input-output models can easily generate these numbers, there is really no such thing as the multiplier. The size of any multiplier is directly related to the structure of the economy, its ability to produce the goods, services and inputs that are required in the second, third and other rounds of spending.

An estimate of the "multiplied" effect of an increase in tourist spending was made by *Pacific Analytics* using the TSA I-O model and TSA data[129]. Their example made some basic assumptions using tourists from California and then estimated the economic impact on the B.C. economy if a group of Californian tourists came to B.C. and spent $14.8 million. Their model estimated that in terms of direct economic impacts B.C.'s GDP would rise by $7.9 million, wages and salaries would increase by $5.1 million and a total of 225 FTE would be created. Extending the analysis to indirect and induced impacts, *Pacific Analytics* estimated that the total economic impact (the sum of direct, indirect and induced impacts) would be an increase of $26.9 million in output, GDP would increase by $14.9 million, wages and salaries would rise by $7.4 million and a total of 319 new FTE would be created. This analysis implies a multiplier of 1.9 which means that each

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[127] British Columbia, Economic Accounts 1961-1989, July 1990.

[128] Peter Murphy, Tourism: A Community Approach, page 90.

[129] Pacific Analytics, Speaking Notes, The Tourism Satellite Accounts: Presentation of Final Results.

new dollar of tourist expenditures will create an additional 90 cents in output in the economy. Although the tourism industry does use a relatively high proportion of local inputs, because of regional characteristics, it is not possible to apply this multiplier to regional tourist expenditures in the province.

Many economists have estimated multipliers for income, wages and employment for particular countries and regions. Computer technology and input-output models can generate them with little difficulty. However, multipliers are probably one of the most misunderstood and misused parts of economic analysis.

"The multiplier concept is quite legitimate and useful, but it can be easily mishandled -- either deliberately or accidentally -- because of technical complexities associated with calculating multipliers and the need for large amounts of precise data[130]. They are not "transferable"; an estimate for one region cannot be "transferred" to another region because the estimate depends upon the availability of local resources and the pattern of local ownership in each region. Regions with limited resources may lose 50% or more of the expenditures from tourists as supplies are purchased from outside the region.

Despite these warnings, many researchers overlook these important points. An example of how easily data can be distorted is shown in the methodology that was used to estimate regional B.C. economic multipliers in a 1986 study[131]. First, the regional multipliers in this study were calculated from the Vancouver I-O model and therefore assumed that the industrial structure in Vancouver could be applied to the rest of the province. Second, the Vancouver I-O model itself was based on 1967 data which was "pushed" to 1972. That means that the multiplier calculations assumed that the structure of Vancouver's industries has remained unchanged since the late 1960's. Obviously, it leaves the accuracy of the final multiplier estimates in grave doubt.

Multiplier analysis suffers from other problems. It assumes that the economy is at full capacity and that any additional stimulation or expenditure will be translated into the demand for additional jobs or supplies. However, if there is excess capacity the businesses will not need to hire more labour or purchase other inputs in the economy, effectively removing any "multiplier" effect. Multiplier analysis also ignores the possibility of economies of scale or changes in technology that can occur as businesses grow; the calculations assume that each dollar of new spending will always create a constant proportion of new jobs or other business.

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[130] Stephen Smith, Tourism Handbook, page 271.

[131] Craig Davis, Income and Employment Multipliers for seven British Columbia Regions.

The conclusion to the multiplier debate is this: in a discussion of the overall economic impacts, they are only rough approximations, and should act as guidelines rather than rules. The real economic impact from particular expenditures can only be determined through detailed regional surveys of businesses in the tourism industry.

## SECTION 11: BALANCE OF PAYMENTS EFFECTS OF INTERNATIONAL TOURISM

### 11.1 The Impact of Tourism in the Canadian Balance of Payments:

Tourism accounts for a significant component of Canada's total exports and imports picture; it generated $7.4 billion in travel receipts from the spending by foreign travellers in Canada and $12.6 billion in travel payments to other countries as Canadians travelled outside the country in 1990[132]. International transportation fares added more than $1.2 billion dollars to Canadian receipts and $1.9 billion to Canadian expenditures[133].

The exports of wheat or forest products are termed "visible" or "merchandise" exports since they result in products being physically transported across international borders. In contrast, the expenditures by foreign tourists in Canada are "invisible exports". These **tourist receipts** are exports because they result in an inflow of monies into the country and are termed "invisible" exports since they involve the sale of services (accommodation, food and beverage, recreation and other services) that cannot be physically transported out of the country. Similarly, the expenditures by Canadian residents outside the country are termed "invisible imports" since these **tourist payments** involve the outflow of monies for tourist services outside the country. The tourist receipts and payments form the **travel account**. The travel account is part of the **services account** which together with the **merchandise trade account** forms the **balance of payments' current account**.

Although Canadian travel receipts from foreign tourists have increased 122% over the last 10 years to $7.4 billion in 1990, travel payments from Canadians travelling abroad have risen even faster, an 176% increase to $12.6 billion over the same period, resulting in a growing deficit in the travel account. Travel payments were 37% larger than travel receipts in 1980; in 1990 they were 70% larger than travel receipts. Factors such as lower international air fares, a proportionally larger "older" population who seek sunshine vacations, rising disposable incomes and the trend towards more exotic vacations have increased the spending of Canadians outside the country. The implementation of the GST and the significant differences between the US and Canadian prices of gasoline, alcoholic beverages and tobacco products have also contributed to an increase in cross-border

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[132] These figures do not include international fare payments. Statistics Canada, Touriscope, International Travel: National and Provincial Accounts, 66-001.

[133] 1989 data from Tourism Policy and International Tourism in OECD Member Countries, tables 16 and 17, OECD, Paris, 1990.

shopping and a record increase in the travel payments account in the second quarter of 1991. The deficit in the travel account has increased in recent years to a record $5.2 billion in 1990 and preliminary data from the first and second quarters of 1991 indicate that the 1991 travel account deficit will set another record.

The impact of tourism on the balance of payments, the total flow of monies into and out of a country, may also be felt in the merchandise trade account and other parts of the services account. The value of merchandise imports increases when tourist facilities (especially those in developing countries) use a higher proportion of imported goods -- building materials, foods and other products -- to serve the foreign travellers. The values of outflows in the service account increase as advertising and promotion expenditures are made in foreign markets and profits are repatriated to foreign owners of tourist facilities. These factors increase the foreign exchange outflows related to tourism and reduce the domestic economic impact from tourism.

## 11.2 British Columbia's Export and Import Components from Tourism:

There is no easy way to measure the export/import impacts of tourism for an individual province since the balance of payments does not record receipts or expenditures by province. However, some estimates are possible from *Visitor '89*, *Resident Travel in B.C.* and the Canadian Travel Survey. The Canadian Travel Survey estimates both the average expenditure per trip of foreign travellers in Canada and Canadian travellers outside Canada, and presents the data according to port of entry. This data can produce rough approximations of the travel accounts related to British Columbia which correlates well with data from *Visitor '89*. The number of person trips and estimates of tourism expenditures are summarized in figures 11A and 11B. The methodological difficulties with these estimates are discussed in subsequent paragraphs.

According to the Canadian Travel Survey data, foreign visitors in B.C. brought approximately $1.2 billion dollars into the province in 1989 which was about 6.6% of the size of B.C.'s merchandise exports. However, Canadians who re-entered the country via B.C.[134] spent approximately $1.5 billion outside Canada, which was about 11% of the size of the province's merchandise imports. According to other estimates from the *Resident Travel in B.C.* study, the B.C. residents spent $2.9 billion outside the country

[134] The Canadian Travel Survey estimates the expenditures by province of re-entry rather than expenditures by province of residence.

Figure 11A:
Number of Foreign Travellers Entering Canada and Number of Canadians Re-Entering Canada by Province of Entry, 1989.
(Data in thousands)

| # OF PERSON TRIPS BY VISITORS TO CANADA | NON-CAN. RES. IN CANADA | NON-CAN RES. ENTERED VIA B.C. | VISITOR STUDY ESTIMATES◦ |
|---|---|---|---|
| US TOURISTS | 12,184 | 2,578 | 2,779 |
| OTHER TOURISTS | 2,927 | 662 | 772.5 |
| US EXCURSIONISTS | 22,521 | 1,647 | |
| OTHER EXCURSIONISTS | 350 | 22 | |
| TOTAL PERSON TRIPS IN CANADA BY NON-RES. | 37,982 | 4,910 | |

| # OF PERSON TRIPS BY CANADIAN RESIDENTS | CANADIAN RES. OUTSIDE CAN. | CANADIAN RES. RETURN VIA B.C. | B.C. RES. STUDY ESTIMATES▫ |
|---|---|---|---|
| TOURISTS TO USA | 15,325 | 2,922 | 3,569 |
| TO OTHER COUNTRIES | 2,996 | 349 | 793 |
| EXCURSIONS TO USA | 44,586 | 12,327 | 4,580 |
| TOTAL PERSON TRIPS OUTSIDE CANADA | 62,907 | 15,598 | 8,942 |

SOURCES: Statistics Canada, 66-001, 66201.
◦Visitor '89: table 25.
▫Resident Travel in B.C.: pages 69 and 79.

Figure 11B:
TOURISM EXPENDITURES: Estimates of Export and Import Values
from International Tourism† by Province of Entry, 1989.
(Data in Millions of Canadian dollars)

| TOURISM EXPORTS (inflow of Can. $) | NON-CAN. RES. IN CANADA | NON-CAN RES. ENTERED VIA B.C. | VISITOR STUDY ESTIMATES○ |
|---|---|---|---|
| US TOURISTS | $ 3,590 | $ 700 | $ 768 |
| OTHER TOURISTS | $ 1,947 | $ 465 | $ 360 |
| US EXCURSIONISTS | $ 388 | $ 28 | |
| OTHER EXCURSIONISTS | $ 10 | $ .7 | |
| TOTAL FOREIGN VISITOR SPENDING | $ 5,935 | $ 1,195 | |
| TRAVEL ACCOUNT RECEIPTS | $ 7,232 | | |

| TOURISM IMPORTS (outflow of Can. $) | CANADIAN RES. OUTSIDE CAN. | CANADIAN RES. RETURN VIA B.C. | B.C. RES. STUDY ESTIMATES□ |
|---|---|---|---|
| TOURISTS TO USA | $ 5,130 | $ 980 | estimate: |
| TO OTHER COUNTRIES | $ 3,009 | $ 350 | $2,600 * |
| EXCURSIONS TO USA | $ 557 | $ 155 | $ 259 ** |
| TOTAL TOURIST SPENDING OUTSIDE CAN. | $ 8,696 | $ 1,485 | $ 2,859 * |
| TRAVEL ACCOUNT PAYMENTS | $10,708 | | |

† Excludes fares paid to all carriers.

* Estimates for total overnight travel by B.C. residents outside B.C. is $3,986 million. The expenditures outside Canada reported in the table were calculated from the figure that 65% of trips outside B.C. were to destinations outside Canada. These estimates probably underestimate expenditures since per day expenditures for foreign travel are generally higher than for domestic travel.

** Estimate for total excursion travel by B.C. residents outside B.C.. Approximately 97% of these excursions were to the USA.

SOURCES: Statistics Canada 66-001, 66-201: Estimates for expenditures for "entered via B.C." was calculated from # of visitors and average expenditures per trip by method of transport or country of residence.

○Visitor '89: table 25.

□Resident Travel in B.C.: pages 69 and 79.

in 1989[135]. Although excursionists both to and from B.C. made up the largest proportion of border crossings, because of the short duration of their trips and low average expenditures excursionists accounted for only a small fraction of total expenditures. Travel to and from the USA accounted for the largest proportion of travel and expenditures in both directions. The significant discrepancy between the Canadian Travel Survey data and the *Resident Travel in B.C.* estimates is due to inherent differences in methodology; some of the major obstacles in estimating the export/import values are discussed on the next page.

Although it is difficult to arrive at a definitive estimate of B.C. residents' expenditures outside the country, there is no doubt that there is a net deficit in the estimated provincial travel account. The *Resident Travel in B.C.* study looked at this travel deficit in a positive light, "the magnitude of the (foreign) expenditure suggests there is a potential market for B.C.-based destinations to capture a larger (market) share".

In addition to the travel account, other payments and receipts in the merchandise trade and services accounts would affect the size of B.C.'s tourism deficit. On the positive side, B.C.'s tourism industries generally have a higher proportion of domestically produced products compared to many other industries. Frequently, tourist facilities feature made-in-B.C. products as part of their appeal to tourists. However, since many tourism operators advertise in their foreign target markets or are owned by foreign companies, the overall size of B.C.'s tourism deficit is probably larger than the figures estimated in figure 11B.

There are a number of obstacles in determining provincial estimates for the export/import impact of tourism. These obstacles, mostly involved with data collection, relate to the problem of classifying a mobile tourist population, the accuracy of the reported expenditure data and the problem of determining the provincial component of transport fares.

The first obstacle in measuring the export/import value of B.C. tourism relates to the mobility of tourists. The Canadian Travel Survey classifies tourists[136] according to the port of entry, however, a foreign tourist who enters Canada at a B.C. border crossing may visit many provinces while vacationing in the country. Similarly, a Canadian tourist returning to Canada via B.C. may be a resident of another province. Therefore, the published data (expenditures by foreign tourists who entered Canada via B.C. and

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[135] This estimate was based on the following data: foreign travel accounted for 65% of the $3,986 billion spent by BC residents on overnight travel outside BC in 1989.

[136] Tourists are travellers who stay at least one night away from their usual place of residence.

expenditures by Canadians who returned to Canada via B.C.) do not exactly correspond to expenditures in B.C. by foreign tourists and expenditures outside of Canada by B.C. residents. Despite the problems relating to available tourist expenditure data, figure 11B shows that there is a good correlation between the estimates from the Canadian Travel Survey data and estimates from *Visitor '89*. The excursionists'[137] estimates do not involve the mobility problem since the same day traveller to B.C. is likely to spend the whole day in B.C. and the Canadian excursionist entering the USA from B.C. is likely to be a B.C. resident.

The second obstacle encountered is the accuracy of reported expenditure data. The Canadian Travel Survey asks travellers to estimate their total tourist expenditures. Generally studies have found that the reported values underestimate actual expenditures by 10% in OECD countries[138]. Travellers unintentionally omit small expenditures, credit card purchases or the value of items such as accommodation or transportation that were paid in advance. Other travellers intentionally underreport their foreign expenditures because they fear that the expenditure data will be used by other government departments to collect taxes. Attempts to collect GST on Canadians' foreign purchases may increase this tax avoidance behaviour and reduce the accuracy of data in the travel payments account.

The third obstacle in measuring the export/import impact of tourism for B.C. relates to transportation fares. When a B.C. resident pays $900 to fly to London, England, or St. John's, Newfoundland, on Canadian Airlines, only part of the $900 is spent in B.C. Because it is difficult to determine the domestic component of transportation fares, international statistics frequently exclude this important component from tourist expenditure data.

Overall, the estimates indicate that approximately 20% of foreign visitor spending in Canada is spent in B.C. The high average expenditures of Japanese and other Asian tourists contributes to this figure. In terms of expenditures outside Canada, B.C. travellers account for approximately 17% of Canadian travel account payments.

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[137] Excursionists are same-day travellers. Their trips do not include an overnight stay.

[138] International Tourism Forecasts to 1995, Economist Intelligence Unit, 1985, page 78.

## SECTION 12: FINAL COMMENTS

The final comment in this paper relates to tourism data. The TSA analysis was only possible because of the voluntary co-operation of businesses in the tourism industry, particularly in the large hotel sector. The financial statements that they provided meant that the TSA data are significantly better than previous estimates.

The existing TSA results are only the start of a process. The TSA calculated 1988 benchmarks and has the methodology in place to extend the analysis. First, more data needs to be collected to update and expand the coverage of the TSA estimates. With the co-operation of more of the smaller hotels detailed regional figures can be generated for the hotel sector. Surveys of the golf courses and ski facilities, two important sectors in regional tourism, will allow a more detailed analysis of these sectors.

Second, since most hotels are computerized, it would be possible to collect data on the breakdown of their sales from credit card slips. Some of the large hotels have already offered to co-operate in this field. Although it would take time and effort to set up the coding system for the computer analysis, once in place, the collection process would be relatively inexpensive and it would show a precise tourism ratio for sales.

Third, the TSA is intended to be a diverse database. Now that the I-O model structure has been completed, the process of creating the rest of the database needs to begin. Other countries, led by the UK, conduct extensive visitor surveys. The UK has the benefit of being an island nation, so that it is much easier to identify the flow of tourists into and out of the country. However, B.C. can do much more in this field. This paper has made the point that the provincial economy gets a tremendous return from the $18 million tourism budget of the government. The TSA has brought B.C. to near the forefront of tourism research; going even further is within our reach.

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## APPENDICES:

Appendix 1: World Tourism Organization Proposed Tourism Definitions

Appendix 2: B.C. Tourism Related Establishments by Employment Size Groups

## APPENDIX 1: Tourism Definitions Recommended by the World Tourism Organization

### INTERNATIONAL CONFERENCE ON TRAVEL AND TOURISM STATISTICS

Ottawa, Canada, 24-28 June 1991

### CONFERENCE RESOLUTIONS

**A. INTRODUCTION**

1. **Considering** that the environment for tourism has undergone rapid changes since the last United Nations Conference on International Travel and Tourism held at Rome in 1963,

2. **Considering** that the development of statistical concepts and frameworks for tourism have not kept pace with this changing environment, and,

3. **Firmly convinced** that a stronger statistical base is essential for a deeper understanding by governments, industries, academia and the public of tourism's contribution to the social, cultural and economic development of all countries in the world,

4. **The World Tourism Organization** and the **Government of Canada** invited participants from the governments, business communities, industry associations, international organizations and academia from all countries to attend the International Conference on Travel and Tourism Statistics, Ottawa Canada, June 24-28, 1991, to address and bring resolution to the many issues that have inhibited the development of internationally standardized statistics for tourism;

**The Conference,**

5. **Convinced** that tourism has become not only a major force in world trade, but also a vital factor in each country's economic, cultural and social development,

6. **Recognizing** that the traditional measures of tourism are not keeping pace with the increasing economic interdependence of all countries and the reduction of political and economic barriers between them,

7. **Aware** that the limited resources for developing statistical programmes make cooperative arrangements between governments and between governments and industry in the gathering and sharing of statistics increasingly necessary,

8. **Considering** that this Conference affords a unique opportunity for individual governments, international organizations, industries and industry associations to establish the groundwork for a harmonized statistical base for tourism,

9. **Decides to adopt** an agenda leading to the development of recommended principles and guidelines for the harmonized measurement of all tourism, both within and between countries, that includes adoption of common concepts, definitions and classifications for tourism supply and demand and the assessment of analytic tools such as economic accounts for tourism and performance meaures for industry;

10. **Recommends** also the adoption of an Action Plan for implementing the recommendations supported by the Conference and for working towards resolution of those issues that remain outstanding.

## B. CRITERIA FOR DEVELOPING COMMON MEASURES OF TOURISM

**The Conference,**

11. **Notes:**

(a) that the present requirements for tourism statistics are exceptionally diverse;

(b) that not only do the National Administrations of each country have requirements for specialized tourism data needs, but that the same holds true for many interest groups, such as industries, industry associations, local communities and academia;

(c) that these interest groups each have specialized needs for data relating to a wide variety of issues such as market analysis, marketing effectiveness, industrial investment, human resource development, policy analysis, and issue-oriented advocacy;

12. **Notes also** that some countries and industries have already established a wide and diverse range of tourism data sources, with varying concepts and definitions, to meet these diverse needs, while other countries have not yet developed significant statistical systems for tourism;

13. **Recognizes finally** that the development of a common language for tourism statistics in this environment represents a significant need;

14. **Endorses** the following principles for guiding discussions at the Conference and establishing priorities for implementation:

(a) that the Conference will strive towards concurrence on the key concepts and common definitions that would fit the majority of situations, recognizing that there would be some cases that would require further analysis and study by the World Tourism Organization and other responsible agencies;

(b) that the recommended definitions and classifications regarding the measurement of tourism should:

i. be of world-wide practical application, in both the developed and developing countries;

ii. emphasize simplicity and clarity;

iii. be limited to strictly statistical purposes; and,

iv. be consistent with current international standards and classifications in other related areas such as demography, transportation, business, international migration, the balance of payments, the system of national accounts, etc. to the maximum extent possible.

(c) that the implementation of the Conference resolutions would focus on the evolutionary nature of data systems taking into account the specialized needs for data, the need to minimize respondent burden, the currently vested data infrastructure, and the resources available for further data development, as well as opportunities for cooperative programmes of data collection, shared methodologies and technological or training assistance;

15. **Recommends:**

(a) that the proposed definitions and classifications be adopted by consensus;

(b) that the text of these definitions and classifications be widely circulated to all interested parties;

(c) that a consultation process be established by WTO to enable all interested parties to express their views on these definitions with a view to reaching agreement by the autumn of 1992, prior to their submission to the United Nations Statistical Commission in February 1993.

## C. BASIC TOURISM CONCEPTS

The Conference,

16. **Recommends** that tourism be defined as the activities of a person travelling to a place outside his or her usual environment for less than a specified period of time and whose main purpose of travel is other than the exercise of an activity remunerated from within the place visited, where:

    (a) the term "usual environment" is intended to exclude trips within the place of residence (1) and routine trips (2);

    (b) the term "less than a specified period of time" is intended to exclude long-term migration; and

    (c) the term "exercise of an activity remunerated from within the place visited" (3) is intended to exclude only migration for temporary work;

17. **Considers** that this broad concept makes it possible to identify tourism between countries as well as within a country;

18. **Notes** that tourism between countries has been an internationally recognized and measured phenomenon for many decades;

19. **Also notes** that it is only relatively recently that many countries have recognized the importance of assessing tourism activity within a country's borders;

20. **Decides to adopt** a standardized terminology for the statistics used to describe and assess both aspects of tourism;

21. **Recognizes** that the initiating event that ultimately defines tourism is a demand-side concept; and

22. **Recommends** that in order to compare tourism activities with the economic activity of other industries, it is also important to define and develop the supply side of tourism statistics;

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(1) Relates to the area of usual residence.

(2) Relates to frequent and regular community trips between the domicile and the workplace and other community trips of a routine character.

(3) By an economic agent resident in the place.

23. **Deeply conscious** that the term "domestic" ("intérieur" in French and "interior" in Spanish) to identify tourism within the country is in such prevalent common usage that changing the use of the term to a more economic orientation could cause some confusion,

24. **Recommends** that, in conformity with the economic accounting terms, in general use, the following common terminology be adopted to describe the three basic categories of tourism:

    (a) "domestic tourism" which comprises "internal tourism" ("interne" in French and "interno" in Spanish) and "inbound tourism" ("récepteur" in French and "receptor" in Spanish), where "internal tourism" refers to residents of a country visiting their own country and "inbound tourism" refers to visits to a country by non-residents;

    (b) "national tourism" which comprises "internal tourism" and "outbound tourism" ("tourisme émetteur" in French and "turismo emisor" in Spanish), where "outbound tourism" refers to residents of a country visiting other countries; and,

    (c) "international tourism" which consists of "inbound tourism" and "outbound tourism";

25. **Also recommends** the collection of statistics from both the demand and supply sides by means of common classification systems for both these components of the tourism activity.

## D. BREAKDOWN OF THE VARIOUS CATEGORIES OF DEMAND-SIDE TOURISM

**The Conference,**

26. **Noting** that consumption patterns for tourism are becoming more complex as the volume and variety of internal and international tourism rapidly increases,

27. **Noting also** that there are several factors leading to such increases: technological change in the travel industry is making travel more comfortable and affordable; the political and economic barriers to international travel are being reduced; increased personal incomes and more leisure time are making leisure travel more feasible on a wider scale; and the globalization of business is demanding a greater degree of business travel,

28. **Recommends** use of a common typology of tourism consumption that would serve both to make international comparisons and to assess the national contribution and impact of tourism;

29. **Recommends:**

(a) that the World Tourism Organization submit the following basic definitions to the United Nations Statistical Commission for endorsement;

(b) that the text of these definitions be annexed to the text of the recommendations; and

(c) that National Administrations adopt these definitions as the core measurement for tourism demand;

| TERMS | INTERNATIONAL (INBOUND AND OUTBOUND) TOURISM | INTERNAL TOURISM |
|---|---|---|
| **Resident** | A person is considered to be resident in a country if he/she has lived in that country for at least a year or twelve consecutive months prior to his/her arrival in another country for a period not exceeding one year. | A person is considered to be resident in a place if the person has lived in that place at least six consecutive months prior to his/her arrival at another place in the same country for a period not exceeding six months. |
| **Visitor** | A person who travels to a country other than that in which he/she has his/her usual residence and that is outside his/her usual environment, for a period not exceeding one year, and whose main purpose of visit is other than the exercise of an activity remunerated from within the country visited. | A person residing in a country, who travels to a place within the country, but ouside his/her usual environment, for a period not exceeding six months, and whose main purpose of visit is other than the exercise of an activity remunerated from within the place visited. |
| **Tourist** | A visitor who travels to a country other than that in which he/she has his/her usual residence for at least one night but not more than one year, and whose main purpose of visit is other than the exercise of an activity remunerated from within the country visited. | A visitor residing in a country, who travels to a place within the country, but outside his/her usual environment, for at least one night but not more than six months, and whose main purpose of visit is other than the exercise of an activity remunerated from within the place visited. |

| | | |
|---|---|---|
| Excursionist (Same-day visitor) | A visitor who travels to a country other than that in which he/she has his/her usual residence, and that is outside his/her usual environment, for less than 24 hours without spending the night in the country visited, and whose main purpose of visit is other than the exercise of an activity remunerated from within the country visited. | A visitor residing in a country who travels to a place within the country, but outside his/her usual environment, for less than 24 hours without spending the night in the place visited, and whose main purpose of visit is other than the exercise of an ctivity remunerated from within the place visited. |

**E. TRIP CLASSIFICATIONS**

**The Conference,**

30. **Recommends** that the main purpose of visit be classified under the following three groups:

    (a) pleasure: leisure, culture, active sports, visits to relatives and friends, other;

    (b) professional: meeting, mission, business;

    (c) other purposes: studies, health, transit, various;

31. **Also recommends** that national tourism statistical programmes progressively use classifications according to purpose of visit, length of stay or trip, origin and destination of trip, means of trnsport and type of accommodation, as modified by the Conference.

**F. EXPENDITURE**

**The Conference,**

32. **Recognizing** that the concept of expenditure is closely linked to that of tourism consumption, defined as the value of goods and services used for the direct satisfaction of visitors,

33. **Recommends** that tourism expenditure be defined as "any expenditure incurred by or for a visitor for his trip";

34. **Recommends** the following definitions for international tourism receipts and expenditure:

    (a) International tourism receipts are defined as the receipts of a country resulting from the tourism expenditure of international visitors;

    (b) International tourism expenditure is defined as tourism

expenditure made by residents travelling abroad as visitors;

35. **Also recommends:**

(a) that receipts and expenditure generated by same-day visitors (excursionists) be classified separately;

(b) that tourism receipts and expenditure include payments for international transport of visitors; and

(c) that, for the sake of consistency with the balance of payments recommendations of the International Monetary Fund, internatinonal fare receipts and expenditure be classified separately.

## G. GEOGRAPHICAL AGGREGATIONS

**The Conference,**

36. **Notes** that the standard practice of the United Nations is to publish geographical data with the following proviso: "Neither the designation employed, nor the presentation of material in this publication, implies any expression of opinion by the reporting organization regarding the legal status of country, territory or area, or of its authorities, or concerning the delimination of its frontier or boundaries";

37. **Considers** that, with the advent of computers, it would be possible to report tourism data coded at the level of the reporting country or area and present it in that form to the World Tourism Organization. The various geographical aggregations can be derived depending on the analytic purpose.

## H. DEFINITION OF SAME-DAY VISITS

**The Conference,**

38. **Notes** that, given the changing behaviour of consumers, the ever-improving technology for travel, which makes travelling over greater distances possible, and the increasing pressures of time, same-day visits are growing in importance as a part of tourism;

39. **Suggests** that the overall concept for same-day visits should be similar to that for tourism: that is, a non-routine break away from the usual environment;

40. **Recommends** that business trips of a non-routine nature be included in the concept of same-day visits and identified separately;

41. **Also recommends** that a distinction be made between the two

main types of same-day travel:

(a) International same-day travel, which comprises the travel of those who have crossed an international frontier for activities of non-routine nature;

(b) Internal same-day travel, which is more complex to define because of the lack of a delineating frontier. The use of thresholds regarding both duration and distance of travel would aid international comparability;

42. **Recognizes** the difficulty of developing effective and comparable measures for same-day visits, particularly within a country;

43. **Considers** that same-day visits would best be defined by a series of characteristics focused on the following criteria:

(a) Round trip
(b) Duration
(c) Distance;

44. **Recommends** that, for the sake of international comparison, minimum thresholds be established for round trip, distance and duration;

45. **Recognizing**, however, that the current inconsistency among countries needing and able to measure same-day visits makes effective international comparison difficult,

46. **Recommends** that data on this phenomenon be reported as a separate subset of tourism.

## I. CLASSIFICATION OF TOURISM SUPPLY ACTIVITIES

**The Conference,**

47. **Convinced** that, while tourism cannot abandon the demand-based definition of its scope, it must seek to more clearly delineate a supply-based structure for its activities,

48. **Firmly convinced** that an internationally compatible standard activity classifcation system is essential to the proper and effective statistical representation of tourism,

49. **Recognizing** that any such classification system should be coordinated and integrated with the internationally-established systems, such as the Revised System of National Accounts and the Balance of Payments Manual,

50. **Also recognizing** that the WTO-developed Standard International Classification of Tourism Activities (SICTA) demonstrates that a supply-oriented activity structure, responsive to the needs of tourism as well as to the needs

for consistency with other classification systems can, with suitable modifications, be constructed,

51. **Recommends:**

(a) that national tourism programmes seek to establish tourism-responsive activity classifications within their national statistical systems that are harmonious with ISIC;

(b) that any future development of tourism classification systems include classifications for functions, transactions and products as well as activities and that, in accordance with United Nations recommendations, the Central Product Classification System (CPC) be placed at the centre of the classification system;

(c) that the SICTA be modified to distinguish direct tourism consumption from the indirect effects of such consumption; and,

(d) that the SICTA code structure be modified to achieve comparability with NACE (European Activity Nomenclature) before the classification is submitted to the United Nations for endorsement in 1993.

## J. TOURISM SATELLITE ACCOUNTS

**The Conference,**

52. **Supports** the development of tourism Satellite Accounts in the framework of the System of National Accounts, deriving from it its main aggregates and basic concepts and allowing a better presentation of economic information;

53. **Recognizes** that the tourism Satellite Accounts will afford the following benefits:

(a) reconciliation of the demand-side data with supply-side data within the Account brings greater coherence to definition of the industry;

(b) use of a recognized accounting system bring enhanced credibility to the economic analysis of the industry;

(c) use of an accounting framework can bring other important information into the analysis of tourism, such as data on value added, human resources development or financial flows;

(d) the accounting framework would provide a useful guide to the development of primary data sources;

54. **Emphasizes** the extensive and innovative work by Canada in

developing an overall tourism information system which incorporates a monetary account as well as other information on the volume and characteristics of the tourism industry;

55. **Recognizes** nevertheless the practical restrictions in implementing an accounting system, viz:

(a) an initial base of reasonably reliable data from the supply side as well as from the demand side is necessary to make the investment in developing a Satellite Account worthwhile; and that

(b) countries with an established System of National Accounts have an advantage in fostering the development of Satellite Accounts;

56. **Recommends:**

(a) that the concept of a Satellite Accounting System be supported; and

(b) that countries introduce the accounting systems into their analytic base for tourism data on an incremental basis as resources become available and the demand for this type of information is realized;

57. **Feels** that, for the implementation of the System, the OECD Manual could provide a useful and practical starting point.

Vern A. Burkhardt
Queen's Printer for British Columbia©
Victoria, 1992

APPENDIX 2

B.C. Establishments by Employment Size Groups, September 1990.

# British Columbia

| SIC | | Employment Size 1-9 | 10-19 | 20-49 | 50-99 | 100+ | Total |
|---|---|---|---|---|---|---|---|
| 9110 | Hotels, Motels and Tourist Courts | 22 | 7 | 5 | 1 | | 35 |
| 9111 | Hotels and Motor Hotels | 284 | 147 | 161 | 99 | 55 | 746 |
| 9112 | Motels | 449 | 82 | 29 | 13 | 6 | 579 |
| 9113 | Tourist Courts and Cabins | 59 | 8 | 5 | | | 72 |
| 9114 | Guest Houses and Tourist Homes | 19 | | 2 | | 1 | 22 |
| 9121 | Lodging Houses and Residential Clubs | 83 | 11 | 8 | 1 | | 103 |
| 9131 | Camping Grounds and Travel Trailer Parks | 146 | 14 | 4 | | | 164 |
| 9140 | Recreation and Vacation Camps | 2 | 1 | | | | 3 |
| 9141 | Outfitters (Hunting and Fishing Camps) | 88 | 16 | 3 | | | 107 |
| 9149 | Recreation and Vacation Camps, Other | 55 | 5 | 3 | 1 | | 64 |
| 9211 | Restaurants, Licensed | 844 | 580 | 588 | 149 | 47 | 2208 |
| 9212 | Restaurants, Unlicensed (Including Drive-ins) | 938 | 243 | 147 | 51 | 22 | 1401 |
| 9213 | Take-out Food Services | 596 | 162 | 69 | 17 | 5 | 849 |
| 9214 | Caterers | 166 | 38 | 25 | 9 | 9 | 247 |
| 9221 | Taverns, Bars and Night Clubs | 133 | 116 | 116 | 12 | 2 | 379 |
| 9610 | Motion Picture, Audio and Video Production and Distribution | 26 | 1 | 1 | 1 | | 29 |
| 9611 | Motion Picture and Video Production | 155 | 19 | 11 | 3 | 4 | 192 |
| 9612 | Motion Picture and Video Distribution | 11 | 3 | 2 | | 1 | 17 |
| 9613 | Motion Picture Laboratories and Video Production Facilities | 13 | | 1 | 1 | | 15 |
| 9614 | Sound Recording Services | 14 | 1 | | | | 15 |
| 9619 | Motion Picture, Audio and Video Services, Other | 3 | 1 | | | | 4 |
| 9620 | Motion Picture Exhibition | 1 | 1 | 1 | | | 3 |
| 9621 | Regular Motion Picture Theatres | 44 | 17 | 10 | 2 | | 73 |
| 9622 | Outdoor Motion Picture Theatres | 10 | 1 | 1 | | | 12 |
| 9630 | Theatrical and Other Staged Entertainment Services | 37 | 6 | 3 | 2 | | 48 |
| 9631 | Entertainment Production Companies and Artists | 81 | 6 | 7 | 3 | | 97 |
| 9639 | Theatrical and Staged Entertainment Services, Other | 26 | 2 | | | 2 | 30 |
| 9640 | Commercial Spectator Sports | 1 | | 1 | | | 2 |
| 9641 | Professional Sports Clubs | 9 | 1 | | | | 10 |
| 9642 | Professional Athletes and Promoters On Own Account | 11 | 1 | | 1 | | 13 |
| 9643 | Horse Race Tracks | 35 | 4 | | | 2 | 41 |
| 9644 | Race Tracks, Other | 3 | | | | | 3 |
| 9650 | Sports and Recreation Clubs and Services | 17 | 3 | 3 | 1 | | 24 |
| 9651 | Golf Courses | 87 | 40 | 26 | 11 | 2 | 166 |
| 9652 | Curling Clubs | 32 | 10 | | | 1 | 43 |
| 9653 | Skiing Facilities | 31 | 5 | 6 | 2 | 7 | 51 |
| 9654 | Boat Rentals and Marinas | 103 | 20 | 19 | 8 | | 150 |
| 9659 | Sports and Recreation Clubs, Other | 196 | 34 | 18 | 9 | 1 | 258 |
| 9661 | Gambling Operations | 56 | 15 | 10 | 2 | 2 | 85 |
| 9690 | Amusement and Recreational Services, Other | 2 | 1 | 2 | | 1 | 6 |
| 9691 | Bowling Alleys and Billiard Parlours | 73 | 18 | 9 | 1 | 1 | 102 |
| 9692 | Amusement Park, Carnival and Circus Operations | 22 | 5 | 3 | 3 | 2 | 35 |
| 9693 | Dance Halls, Studios and Schools | 36 | 3 | 1 | | | 40 |
| 9694 | Coin-operated Amusement Services | 48 | 8 | 6 | | | 62 |
| 9695 | Roller Skating Facilities | 1 | 2 | | | | 3 |
| 9696 | Botanical and Zoological Gardens | 6 | 1 | 2 | | 2 | 11 |
| 9699 | Amusement and Recreational Services N.E.C., Other | 122 | 14 | 10 | 9 | 15 | 170 |
| 9921 | Automobile and Truck Rental and Leasing Services | 149 | 20 | 11 | 6 | 1 | 187 |
| 9961 | Ticket and Travel Agencies | 60 | 6 | 4 | 7 | 2 | 79 |
| 9962 | Tour Wholesalers and Operators | 10 | 3 | 1 | 2 | | 16 |
| 9991 | Parking Lots and Parking Garages | | 1 | 1 | 1 | 2 | 5 |
| 9999 | Services N.e.c., Other | 22 | 8 | 4 | 2 | 6 | 42 |

Source: Statistics Canada. Prepared by: Ministry of Finance, Planning and Statistics Division.